COLLECTING INSTITUTIONS IN THE NETWORK SOCIETY

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CANDIDATE DECLARATION

I, Christopher Batt, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

ABSTRACT

Collecting Institutions in the Network Society is a multidisciplinary study examining present practices and policies of collecting institutions (museums, galleries, libraries and archives) in their use and development of digital technologies, within the context of wider socio-technical change. It investigates whether existing service paradigms are best suited to future digital delivery of services in the emergent Network Society.

It uses an interpretive methodological approach creating a body of phenomenological evidence enabling comparison between the organisational context, internal practices, histories and policies of collecting institutions, and the wider socio-technical impact of the Internet. Literature reviews provide evidence from the 'outer world' of Internet developments and impact to establish four Generic Drivers of Internet Change. For the 'inner world' of collecting institutions, organisational context and research and development on innovation are examined to analyse various perspectives on common approaches to service policy and practice. Additionally, textual analysis of institutional mission statements and policy documents is used to establish the degree of common purpose across collecting institutions and the preparedness of practitioners and policymakers to deal with rapid socio-technical change.

The evidence is synthesised to define an Institutional Paradigm describing the present operational processes and practices of collecting institutions. This is compared with the four Generic Drivers to define opportunities and challenges that collecting institutions face in exploiting the Internet. This synthesis demonstrates that the siloised and fragmented nature of the Institutional Paradigm creates significant barriers to effective exploitation. Evidence from the textual analysis is used to develop a Shared Mission Statement for all collecting institutions as the foundation of a strategic digital future.

The study proposes a radically new service paradigm (the Digital Knowledge Ecology) enabling collecting institutions to achieve maximum user value in their delivery of digital services, and concludes with proposals for actions to build a collective strategy.

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LIST OF ACRONYMS

ACE	Arts Council England
AIM	Association of Independent Museums
ALMA-UK	Archives, Libraries and Museums Alliance UK
ARA	Archives and Records Association
CILIP	Chartered Institute of Library and Information Professionals
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CUKT	Carnegie United Kingdom Trust
CyMAL	Museums, Archives and Libraries Wales
DCAL	Department of Culture, Arts and Leisure (Northern Ireland)
DCMS	Department for Culture, Media and Sport (England)
ELFNI	Integrated digital libraries project in Northern Ireland
EH	English Heritage
GDS	Government Digital Service
GLLAM	Group for Large Local Authority Museums
H1	Sustaining Innovation (Three Horizons Model)
H2	Disruptive Innovation (Three Horizons Model)
H3	Transformative Innovation (Three Horizons Model)
IFLA	International Federation of Library Associations
MA	Museums Association
MGS	Museums Galleries Scotland
MLA	Museums, Libraries and Archives Council
MoJ	Ministry of Justice
MOOC	Massive Open Online Course
NAS	National Archives Scotland
NT	National Trust
NGU	Next Generation User
NIMC	Northern Ireland Museums Council
NMDC	National Museums Directors' Conference (now Council)
NMNI	National Museums Northern Ireland
ONS	Office for National Statistics
OxIS	Oxford Internet Survey
PRONI	Public Record Office of Northern Ireland
RIN	Research Information Network
RLUK	Research Libraries UK
SCL	Society of Chief Librarians
SCONUL	Society of College, National and University Libraries
SLIC	Scottish Library and Information Council
TNA	The National Archives

PART ONE
Introduction and Strategy

CHAPTER ONE
Introduction

1.1 CHAPTER PURPOSE

Chapter One provides a brief introduction to the research presented in this thesis. It will achieve this by describing:

- The purpose and scope of the research;
- The reasons why the research is important and timely;
- The structure of the thesis with brief details on each of the chapters;
- The Research Objectives.

1.2 PURPOSE AND SCOPE OF THE RESEARCH

The thesis investigates the opportunities and uncertainties that collecting institutions (museums[1], libraries and archives) face arising from the social impact of digital technologies and the Internet, both of supply and demand. The Research Hypothesis in Table 1.1 is predicated on the probability that the continued rapid evolution driven by socio-technical determinism brings into question the relevance of traditional service models to the design and delivery of successful digital services.

The existing paradigm(s) of collecting institutions defined by the requirement to provide public value from physical collections in fixed locations may not be able to accommodate successfully the development of online service offers that are distinctive in form and maximise public value through alignment with trends in user needs and behaviours.

Table 1.1 *Research Hypothesis*

There is no simple or easy response to this hypothesis. Its purpose is to provide a point of departure for strategic discussion about the future relationships between collecting institutions and the competitive and complex landscape of the Internet. It raises questions of both policy and professional practice. For example:

- How might the balance between the physical and virtual change in the future?
- What might be the implications for future organisational processes and structures?
- What might be the implications for practitioner skills and training?
- What are the implications for advocacy?
- What public value benefits might be achieved?

The thesis explores and models the potential utility of a new, shared service paradigm for collecting institutions as they develop services in the digital space[2]. It articulates the key challenges in a form that will support collective strategic debate about future possibilities encompassed by the five questions above. There is currently neither national forum nor agenda

[1] Including galleries with permanent collections.
[2] The term digital space is used throughout the thesis to describe the virtual space of the Internet. The intention is to contrast collecting institutions' online activities with the traditional approach of the fixed location – the physical space.

for such a debate. A hypothesis is no more than a first step in defining an observed problem:

> "…a hunch, assumption, suspicion, assertion or an idea about a phenomenon, relationship or situation, the reality or truth of which you do not know…In most cases the hypothesis will be based upon previous studies or on your own or someone else's observation." (Kumar, 2005, p5)

Consequently, at the outset of the research the first task is to formulate the hypothesis as Primary Research Questions able to guide both epistemological and methodological decisions of approach and actions necessary to conducting the research in a structured and accountable way. Two such questions form the basis for the creation and conduct of the research programme:

1. **Social Analysis:** Is the traditional service paradigm of collecting institutions (museums, libraries and archives) suitable to maximise the value of collections delivered digitally?
2. **Modelling and Utility:** If not, is it possible to model a service paradigm better fitting the needs of the Network Society and how might such a conceptual model be exploited in support of professional practice?

Table 1.2 *Primary Research Questions*

The first of these questions requires deep analysis of contemporary evidence to establish whether it is possible to identify a single service paradigm across 'the inner world' of museums, libraries and archives. This is mapped against evidence of socio-technical drivers of change in the 'outer world' of a society where digital networks are "…the predominant organisational form of every domain of human activity": Castells' definition of the mature Network Society (Castells, 2010, xliv). This mapping illuminates the degree to which collecting institutions are taking maximum advantage of digital opportunities and also the degree of preparedness of practitioners to deal with the speed and extent of technological and social change. The Social Analysis therefore includes two tasks:

1. To identify the emergent differences and commonalities between the missions and paradigms of collecting institutions and the evolving Network Society.
2. To examine the readiness potential (Bereitschaftspotenzial) of collecting institutions to respond to a changing environment.

Table 1.3 *Elements of the Social Analysis research*

The evidence and analysis in support of these two tasks is contained in Part Two (Chapters Three to Eleven), while conclusions about modelling and utility are synthesised in Part Three (Chapters Twelve to Sixteen). Section 1.4 of this chapter provides an outline of the structure of the thesis with brief details of the purpose and content of each of the chapters. Before examining the key reasons why the research is important and timely, elaboration is needed to explain the use of the word Bereitschaftspotenzial in relation to readiness potential in the second task. It is used to connect to a concept borrowed from neuroscience referring to "the pre-motor planning of volitional movement" (Kornhuber and Deecke, 2012, p39), more simply described as the ability to react rapidly to the unexpected. It is used in this thesis as a means of judging the preparedness of collecting institutions to respond positively and quickly to the

challenges created by the socio-technical determinism of the Internet[3].

1.3 WHY THE RESEARCH IS IMPORTANT AND TIMELY

1.3.1 **SOCIO-TECHNICAL CHANGE**

> "The Internet has fundamentally changed the structure of all organisations and industries". (Bracken, 2014)

The past ten years have seen a dramatic increase in the reach and impact of the Internet on everyday life. The utility and diversity of network-based services have changed social behaviours and expectations and ever-growing demand has fuelled rapid innovation. In the private sector radical structural change has already taken place in sectors such as the recorded music industry and retailing (Naughton, 2012a). Traditional industries have frequently struggled to respond to the speed of market evolution and to competition from start-up entrepreneurs and innovators. Google and Facebook grew from student ideas to become global phenomena. This scale and rate of change show no signs of slowing as the Network Society matures. It is impossible to know if or when these effects will lead to a stable plateau where new long-term sectoral and organisational structures can emerge, or whether the future will see a social fabric reflecting the post-modern sense of "always becoming" (Lyotard, 1991, p16), constantly reforming around communities of interest and new technological platforms.

The UK public sector has responded to these changes by adopting and adapting the Internet to manage and deliver both informational and transactional services ranging from digital versions of guidance notes previously in paper form, online tax returns and various transactional processes. As a result, digital public services have generally continued to reflect the form and structure of traditional systems. The increasingly central role digital networks perform within society present public sector policymakers and practitioners with a dilemma. The purpose of public service is to meet consistently and effectively the needs of citizens, yet those citizens may have changed expectations in relation to how a service is delivered, its form and how they may interact with it. There is, thus, an urgent task to examine whether traditional public service structures, delivery channels and missions are now becoming less relevant to user need in a society increasingly dependent on and eager to use digital technologies. This may demand the kind of transformation that Kuhn describes as a "paradigm shift", a radical change in the assumptions, theories and values of policymakers and professionals (Hung, 2006, p5).

Museums, libraries and archives have a duty to create, curate and disclose collections in support of the public good – they are collecting institutions. The changes wrought by the Internet are beginning to alter fundamentally the materials that institutions collect and how collections may be exploited. Collecting institutions face challenges not only from the expectations of users to have 24/7 access to services, but also they must respond both to the changing forms of what they collect and the increasingly competitive nature of the market.

[3] Throughout this thesis 'Internet' is used as shorthand for the combined effects of technologies described elsewhere as 'information and communication technology' or 'digital technologies and the Internet'.

As user-facing services their effectiveness depends on matching supply channels to the needs and expectations of users and the widening choices available to them. Effective digital delivery of services has the potential to make possible both new experiences for the user and new opportunities for the institution. Interaction with new forms of content is no longer managed within a physical location, enabling very different institutional and user behaviours. Content is available to the user when, where and how they wish to use it and can be mixed and mashed into user-specific packets of knowledge relevant to their particular need at a particular moment, redefining the relationship between the individual, learning and the whole body of public knowledge.

There is a second reason why the research is important and timely. The impact of the global financial crisis in 2008 (Piketty, 2014) continues to have dramatic effects on public spending from which collecting institutions have not been immune. Services have been closed, reduced in range and accessibility and new management arrangements put in place. The period since 2000, therefore, provides the opportunity to review both strategy and innovation within collecting institutions in the context of significant socio-technical and financial change, to ascertain the extent to which current service paradigms remain fit for purpose to exploit the opportunities of the Network Society.

1.3.2 **RESEARCHER EXPERIENCE**

The Research Hypothesis questions whether the current service paradigms of collecting institutions will continue to be effective in the face of socio-technical change. Recognition that such change might demand new organisational approaches within collecting institutions is based on the researcher's more than four decades experience working in and with collecting institutions. This provided an extensive range of experience and insights into processes of service innovation *at the sharp end* and the *development and delivery of policy* at local, regional and national levels.

As Director of Cultural Services in the London Borough of Croydon the researcher was responsible for the planning and development of a major new cultural centre – the Croydon Clocktower. This project embraced the design of a large central library and the creation of a local museum from scratch using digital techniques to link the museum closely with the archive and library services. The Clocktower project demonstrated how, even in the early '90s, such techniques might act as integrator of the different collections. The Clocktower continued to exploit the emerging technologies of the Internet during the '90s, being one of the first public library services to offer extensive free public access.

Across the period of the '80s and '90s the researcher undertook six major surveys of the use of information technology in UK public libraries (**Batt**, 1985; 1987; 1989; 1992; 1994; 1998). These surveys highlighted the ways in which the UK public library service was able to integrate the new media of Internet, CDRom and automated management systems into the core offer, providing a collective bridge from the printed word into the digital space. In 1999, as a result of his management and development experiences the researcher was appointed to lead the UK

wide People's Network Project; a major (£170m) project to provide public access to the Internet in all public libraries, train 40,000 library workers in digital skills and invest £50m in the development of new digital learning resources across museums, libraries and archives. The successful completion of this project led to appointment as Chief Executive of the Museums, Libraries and Archives Council (MLA) in 2003. In that role the researcher directed national policy development for all of England's museums, libraries and archives, working closely with Departments of State, other national agencies and the professional bodies.

This wide range of experience has been enriched further by the opportunity to engage with practitioners and policymakers in North America, Europe and Australasia, speaking on and debating the topic of digital innovation and institutional convergence. In addition the researcher twice chaired the DISH: Digital Strategies in Heritage international conference[4], moderates the Digital Cultural Content Forum[5], a global think tank of policymakers and practitioners, and for five years chaired Jisc's Strategic Content Alliance[6]. Alongside these speaking and chairing activities, a number of published contributions over many years have explored the future relationship of collecting institutions to wider social-technical change (Batt, 1999; Batt, 2001; Batt, 2003; Batt, 2013a). On leaving the MLA in 2007 a number of developmental projects were undertaken for Jisc. These included a study in the building of two-way relationships between digital collections in universities and wider communities (Batt, 2009a), development of Digipedia, a wiki-based resource for the digital content lifecycle (Batt, 2010), acting as a critical friend on a number of Business and Community Engagement[7] projects and membership of the Content Advisory Board and the recent Spotlight[8] project examining the means of disclosing digital collections more widely and more effectively. Finally, advisory roles have been undertaken for Artstor[9] in New York, the Your Paintings project[10] and BBC's Digital Public Space project[11].

Key learning points from this body of experience that underpin the Research Hypothesis may be summarised as:

- Socio-technical change in the outer world, described above, has enabled new private sector service propositions that challenge the traditional monopolistic status of collecting institutions and redefine information-seeking behaviours and expectations.

[4] DISH – Digital Strategies in Heritage home page. Available at: http://dish2013.nl. [Accessed 10th July 2015].
[5] Digital Cultural Content Forum home page. Available at: http://digitalculturalcontentforum.org. Accessed 10th July 2015].
[6] Strategic Content Alliance archives home page. Available at: http://www.webarchive.org.uk/wayback/archive/20110324230520/http://www.jisc.ac.uk/whatwedo/themes/content/contentalliance.aspx. [Accessed10th July 2015]
[7] Jisc Business and Community Engagement Programme home page. Available at: https://www.jisc.ac.uk/rd/projects/business-and-community-engagement. [Accessed 10th July 2015]
[8] Jisc Spotlight Project home page. Available at: http://digitisation.jiscinvolve.org/wp/2013/09/09/spotlight-on-the-digital-how-discoverable-are-your-digitised-collections/ [Accessed 10th July 2015].
[9] Artstor home page. Available at: http://www.artstor.org [Accessed 10th July 2015]
[10] Your Paintings home page. Available at: http://www.bbc.co.uk/arts/yourpaintings/. [Accessed 10th July 2015].
[11] BBC Digital Public Space blog. Available at: http://www.bbc.co.uk/blogs/bbcinternet/digital_democracy. [Accessed 10th July 2015]

- Traditionally, collecting institutions have operated within highly stable organisational structures that provide control and stability in the provision of services, where change is slow and incremental.
- The governance and management structures have made collaboration across different types of institutions an activity that sits outside of the main duties of serving audiences defined by geography or institutional role (local authority, school, university, etc)
- Generally, professionals have found it difficult to consider collectively the long-term implications of digital developments for service reform and innovation.
- To maintain the vital contribution that museums, libraries and archives have made to formal and informal learning for more than a century there is an urgent need to reflect on the future strategic organisation and delivery of digital services.

While this may represent an unusually broad portfolio of professional experience, it cannot be claimed as unique. However, this experience must be placed within the context of the researcher's learning in higher education and preferred learning/thinking style. After becoming a Chartered Librarian, the researcher studied with the Open University, gaining a first class honours degree in Systems and Organisational Theory. This provided practical and theoretical knowledge of structures, both organisational and social and the tools to understand them that was extended and applied in both practical projects and policy development over the subsequent 30 years. This experience, rooted in a learning style strong in visual thinking and spatial intelligence, supported pattern recognition in often-complex social and organisational settings.

Framed within the concept of bounded rationality, this extensive mix of practical management and delivery; involvement with the practice and policies of museums, libraries and archives; experience of applying systems methodologies to solve complex problems, founded on a wide theoretical knowledge of systems and organisational theory, provides an exceptionally broad and multidisciplinary set of skills and experiences to be applied to the research.

1.4 STRUCTURE OF THE THESIS

This section provides a short summary of subsequent chapters and their topics to act as a route map to the research processes.

1.4.1 **PART ONE: INTRODUCTION**

Chapter Two – Research Philosophy and Strategy. The chapter reviews the options for undertaking interpretative research on social systems, assesses the requirements of the Research Objectives and describes the methodological tools chosen.

1.4.2 **PART TWO: SOCIAL ANALYSIS**

Chapter Three – Introduction to the Social Analysis.

Chapter Four – Literature Review: Digital Innovation and Social Change - Key Trends. This chapter reviews contemporary literature on the technical and social drivers of innovation from 2000 to August 2014 with examples of both broad social impact and changes in the

behaviours and expectations of individuals. Four Strategic Drivers of Internet Change (subsequently described as Strategic Drivers of Change) are derived from the evidence.

Chapter Five – Institutional Analysis: Mission and Purpose. The intention of this chapter is to understand practitioners' perceptions of purpose. Textual analysis is used to establish similarities and differences across collecting institutions, using a large sample of mission statements and a range of policy and advisory documents published since 2000.

Chapter Six – Literature Review: Organisational Structures, Policy and Power. This chapter reviews UK public service structures, processes of control and innovation in order to develop a generic Institutional Paradigm. It then considers the roles and status of collecting institutions within the Institutional Paradigm.

Chapter Seven – Strategic Approaches to Service Innovation. An introduction is provided to the methods used in Chapters Eight to Eleven.

Chapter Eight – Libraries. Analysis of strategic and policy documents from 2000 to August 2014 (UK wide and Home Nation specific).

Chapter Nine – Museums. Analysis of strategic and policy documents from 2000 to August 2014 (UK wide and Home Nation specific).

Chapter Ten – Archives. Analysis of strategic and policy documents from 2000 to August 2014 (UK wide and Home Nation specific).

Chapter Eleven – Literature Review: Disruptive Innovation in Theory and Practice. This chapter provides an analysis of the literature on museums, libraries and archives from 2000 to August 2104 that examines forms and scope of service innovation using the Internet.

1.4.3 PART THREE – SYNTHESIS, OUTCOMES AND SUBSEQUENT ACTIONS

Chapter Twelve – Introduction to Part Three.

Chapter Thirteen – Collecting Institutions: Similarities and Differences. Using data from Chapter Five the chapter develops a Shared Mission Statement relevant to all collecting institutions. From the analysis of strategic documents in Chapters Eight to Ten it examines the extent to which collecting institutions have evolved the Institutional Paradigm in response to the emergent Network Society.

Chapter Fourteen – Collecting Institutions: Opportunities and Challenges. This chapter compares the key features of the Institutional Paradigm with the Four Drivers of Change to produce a menu of opportunities enabled by service delivery online. It then considers the constraints within the Institutional Paradigm that must be overcome to successfully take advantage of the opportunities.

Chapter Fifteen – Change and the Need for a New Ecology. From the evidence of Chapter Fourteen, the chapter identifies three Strategic Challenges that collecting institutions must address to gain full benefit from digital service provision. It then presents a conceptual Digital

Knowledge Ecology model of how maximum value might be delivered through a shared strategic framework.

Chapter Sixteen – A Blueprint for Change. A Dissemination Plan is presented as the means of awareness raising with practitioners and policymakers, together with proposals on steps and priorities for collective action towards the shared Digital Knowledge Ecology. Finally, examples of potential medium to long-term benefits are described.

1.5 RESEARCH OBJECTIVES

In the planning of the research programme a series of Research Objectives and Tasks were identified grouped into three research stages, as presented in the previous section. These stages, Objectives and Tasks are summarised below, forming the basis for the various chapters of the thesis.

1.5.1 PART ONE – RESEARCH INTRODUCTION

RESEARCH METHODOLOGY SELECTION CHAPTER TWO	
Objective	**Scope**
RESEARCH OBJECTIVE 1 Decide on the appropriate methodological tools	Establish the research philosophy, perspective and methodology
METHODS: Search and review literature, including relevant theses	

Table 1.4 *Research methodology selection*

1.5.2 PART TWO – SOCIAL ANALYSIS

DIGITAL SUPPLY AND DEMAND: KEY TRENDS IN THE OUTER WORLD CHAPTER FOUR	
Objective	**Scope**
RESEARCH OBJECTIVE 2 Identify the key supply-side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space	• Nature and impact of new content formats and supply chains • New public sphere service propositions external to public sector provision and their channels of delivery • New business models and approaches to innovation • The emergence of contestable markets where previously the public institution was a monopolistic provider • The dynamics of change and its effect on other market sectors
RESEARCH OBJECTIVE 3 Identify the key demand-side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space	• User behaviour in the adoption and use of digital technologies and service; the importance of time constraints • Review service design from the user perspective
METHODS: Literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 1.5 *Digital innovation and social change – key trends*

COLLECTING INSTITUTION ANALYSIS CHAPTERS THREE TO ELEVEN	
Objective	**Scope**
RESEARCH OBJECTIVE 4 Identify the form, components and priorities across collecting institutions that define and direct existing service propositions	• Examine organisational structures • Knowledge policy, wider policy, power structures, and clarity of service missions in relation to public policy • Values and norms as reflected in professional literature linked to institutional purpose and digital innovation
RESEARCH OBJECTIVE 5 Review examples of the development of digitally based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change	• Commitment and ability of institutions and practitioners to change their service worldviews in the face of external change • Examples of engagement with digital services • Review research on innovation and the diffusion of digital services provided by collecting institutions
METHODS: Textual analysis, literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 1.6 *Collecting institution analysis*

1.5.3 PART THREE – SYNTHESIS, OUTCOMES AND FUTURE ACTIONS

SYNTHESIS CHAPTERS TWELVE TO FOURTEEN	
Objective	**Scope**
RESEARCH OBJECTIVE 6 Develop a limited number of major factors influencing the current behaviours, opportunities and challenges for collecting institutions	• Compare the key supply-side trends of Research Objective 2 with the existing service paradigms defined by Research Objectives 3 and 4. • Identify the core differences between the trends in the 'outer world' with the prevailing service paradigms
RESEARCH OBJECTIVE 7 Create a mission statement relevant to all collecting institutions to influence collectively government policy	• Commitment and ability for institutions and practitioners to change their service worldviews in the face of external change • Examples of engagement with digital services • Review research on the use of digital services provided by knowledge institutions
RESEARCH OBJECTIVE 8 Establish the readiness potential of institutions and practitioners for dealing with the speed and diffusion of socio-technical change	• Review of the evidence on research and innovation from Research Objective 4 and compare with the key supply-side trends and drivers of Research Objective 2.
METHODS: Synthesis process using the evidence of Part Two	

Table 1.7 *Synthesis*

OUTCOMES AND FUTURE ACTIONS CHAPTERS FIFTEEN TO SIXTEEN	
Objective	**Scope**
RESEARCH OBJECTIVE 9 Create a conceptual model of the service paradigm for collecting institutions to deliver maximum value using the Internet	• Develop a model based on the outcomes of Research Objectives Six and Seven • Describe the differences between the conceptual model and the traditional service paradigm
RESEARCH OBJECTIVE 10 Prepare a Dissemination Plan and recommendations for future actions and benefits from the use of the conceptual model	• Draw up actions required to disseminate the work described in the thesis in a form that will generate interest in beginning debate about the possibility for change • Prepare a list of key steps, priorities and benefits that would form the foundation of a debate about radical new approaches to the development, management and deployment of digital services by collecting institutions
METHODS: Synthesis from Research Objectives 6, 7 and 8	

Table 1.8 *Outcomes and future actions*

These objectives form the foundation of the research process and will be used as reference points throughout the thesis and as the means of assessing the overall outcomes of the research that are reported at the conclusion of Chapter Fifteen.

CHAPTER TWO
Research Philosophy and Strategy

2.1 CHAPTER PURPOSE

This chapter focuses on the selection of the principles and methods to be applied to address the Research Objectives. It does this by:

- Examining the nature and intentions of the research;
- Setting out the appropriate philosophical principles (epistemology) that should form the foundation upon which the research is developed;
- Identifying methodological tools to be applied to the Research Objectives of the project plan in Chapter One.

2.2 NATURE AND INTENTIONS OF THE RESEARCH

There are three features of a research programme that influence the choice of epistemological principles and methodological tools to be used (Denscombe, 2007):

- Theme of the research;
- Scope of the research;
- Intention of the research.

Each of these is considered briefly before examining the portfolio of principles and methods to be used.

2.2.1 **THEME OF THE RESEARCH**

> "By 'real-world problems' I mean problems of decision, in social systems, that arise, which we find ourselves facing, in contrast to the scientist's problem in a laboratory which he can define and limit. The scientist selects the most difficult problem which in his judgment offers a reasonable chance of solution: real life pushes its problems upon us".
> (Checkland, 1999, p72)

The research addresses "real-world problems" situated within a landscape of complexity and uncertainty. Its theme examines how it is possible for public sector organisations to plan a strategic future that maintains their value in a time of significant socio-technical change. This is achieved through examination of the present realities of relationships and interactions between public institutions (their organisational structures and policies), practitioners' groups, and the behaviours and expectations of social groups to identify trends that will influence future institutional strategies. The Research Hypothesis questions the relevance of collecting institutions' existing service paradigms for the effective delivery of digital services. This thesis explores the potential for common purpose across three institutional sectors that, to date, have never found the need to share strategic planning. Jalonen (2011, p408) suggests that in social systems "wicked problems" (problems that, despite good planning, occur unexpectedly) can only be solved by resilience and collaboration. Finding strategies for dealing with such wicked

problems is an important outcome of the research.

2.2.2 SCOPE OF THE RESEARCH

The research proposes a meta-sector called ‘collecting institutions’ that includes all museums, libraries and archives engaged with the provision of services of public value. The purpose of this thesis is to justify the Research Hypothesis, that the future will call for a redefinition of the existing service paradigm drawing the institutions closer in the digital space. As will be shown later, the reality is that today museums, libraries and archives invariably operate in separate silos and, indeed, frequently in silos within silos. Additionally, the research aspires to assess public policy from the perspective of organisational behaviour; power and control in the public sector; and broad trends in social change driven by the Internet. The research is rooted in both observed experience and the knowledge of academic disciplines ranging from policy studies, economics, social science, the disciplines of collecting institutions and future studies. It is, therefore, a multidisciplinary study requiring research methods able to accommodate the granularity of everyday experience with the broad holistic view needed to highlight systemic patterns.

2.2.3 INTENTIONS OF THE RESEARCH

The Research Objectives in Chapter One make clear that the intention of the research is not to develop practical solutions to the challenges and opportunities that collecting institutions face in the digital space. The Primary Research Questions call for the examination of current practice and social change, first to establish the *fit* between services and the emergent Network Society and, second, from that evidence to model a service paradigm for the strategic development of digital services. Research Outcomes are intended to enable debate leading to action.

Section 2.2 has identified a range of issues concerning the theme, scope and intention of the research described in this thesis. It identifies three significant concepts that must be considered in the selection of research principles and methodological tools:

- The research addresses real-world problems within social systems demanding techniques able to deal with diverse actors and institutions and the complexities and uncertainties of real life.
- The research is multidisciplinary requiring understanding not only of the purposes, behaviours and priorities of collecting institutions, but also the organisational structures and policies in which they exist and the dynamics and impacts of socio-technical trends in the outer world.
- Research techniques will need to accommodate the wide range of granular details about relationships and behaviours and make possible the aggregation of that evidence into holistic concepts and models able to stimulate wide debate.

2.3 EPISTEMOLOGY AND METHODOLOGICAL TOOLS

2.3.1 **EPISTEMOLOGY AND THEORETICAL PERSPECTIVE**

Maynard and Purvis (1994, p10) defines epistemology as, "…concerned with providing a philosophical grounding for deciding which kinds of knowledge are legitimate" and is a fundamental point of departure for establishing research processes and methods. Yet texts on research philosophies for the social sciences demonstrate a lack of consistency in the language used to describe the different epistemological perspectives (Robson, 2002; Denscombe, 2007; Kumar, 2005; Jackson, 2003). However, the meanings offered by the differing vocabularies do offer common ground. For example, Crotty (1998, p5) lists three epistemological categories - *objectivism*, *constructionism* and *subjectivism*, while Robson (2002, chapter 2), although avoiding the term epistemology, presents three approaches to social research – *positivism*, *realism* and *relativism.* These three categories reflect a continuum described by other writers. *Positivism* is the world of Checkland's scientist above and Popper reflects Checkland's view that social systems are too unpredictable to submit to the positivist scientific approach:

> "…we must reject the possibility of a theoretical history; that is to say of a historical social science that would correspond to theoretical physics" (Popper, 2002, xii)

Clearly the positivist approach is inappropriate to the current research topic just as, at the other end of the continuum, *relativism* presents challenges since, in its most radical form, it proposes that, "…there is no external reality independent of human consciousness" (Robson, 2002, p22). Such a point of departure is not relevant to this study on collecting institutions. Situated between these two extremes Robson's *realism* (Crotty's *constructionism*) offers an epistemology more fitting to the themes and intentions of this research. Following Robson's reasoning, he proposes that realism is seen as taking the strengths of both *positivism* and *relativism*:

> "Realism accepts that there are fundamental differences between natural and social phenomena. This means that different methods have to be used for different subject matter. Realism permits a new integration of what are usually referred to as subjectivist and objectivist approaches to social theory." (Robson, 2002, p41)

Greenwood provides a practical example:

> "Physical and social phenomena... differ in one essential respect. Chairs may exist independently of our knowing that they do; our knowledge of chairs is not constitutive of their existence. In contrast, social phenomena do not exist independently of our knowledge of them... Social realities, therefore are constructed and sustained by the observation of the social rules which obtain in any social situation by all the social interactors involved... Social reality is, therefore, a function of shared meanings; it is constructed, sustained and reproduced through social life." (Greenwood, 1994, p85)

These quotes provide two useful insights into the nature of social realism. Robson underlines the need for flexibility in methods depending on the particular circumstance being researched, while Greenwood makes clear the essential need to observe and seek evidence to look for the patterns that make up the "shared meanings". Outhwaite (1987, p22) refers to realists analysing causality "…in terms of the nature of things and their interactions, their causal powers and

liabilities". Weber offers perhaps the simplest distinction between positivism and interpretivism (Feest, 2009, p276). He proposed that the human sciences (interpretivism) are concerned with *verstehen* (to understand) while the natural sciences (positivism) are concerned with *erklären* (to explain). The human sciences focus on the understanding of the reasons why things are as they are, while the natural sciences seek to explain causal links that might form the basis of universal laws. The interpretation and understanding of shared meaning from the observation of social realities provides a good fit with the nature and intentions of the research described in Section 2.2:

> "The interpretive approach looks for culturally derived and historically situated interpretations of the social world." (Crotty, 1998, p67)

Robson adds granularity to this definition by pointing out that social realism may be successfully used when dealing with significant complexity:

> "The real world is not only very complex but also stratified into different layers. Social reality incorporates individual, group and institutional and societal levels. The activities of people in society represent a set of interacting things and structures. The task of the social scientist is to establish their existence and properties through both theoretical and experimental work". (Robson, 2002, p34)

From this review of epistemology and theoretical perspectives it is clear that the research domain, of social systems within a complex and changing environment, calls for an interpretive epistemology within the perspective of social realism. This will provide the methodology and tools best able to deliver justifiable Research Outcomes.

2.3.2 RESEARCH METHODS REQUIREMENTS

Turning to the selection of methodology, the requirements may be summarised in the following four points. The methodology and methods must:

- Embrace social phenomena both at a high, aggregated level and at the level of detailed analysis.
- Allow a range of different perspectives to be considered and compared.
- Have the ability to present a complex set of relationships in a form that is simple to understand.
- Provide flexibility in approach facilitating response to changing circumstances and understanding while retaining the credibility of the methodology.

As noted above, the strategic nature of the research demands an approach able to accommodate the complexities of individual to organisation and organisation to organisation relationships, and also the diversity of disciplines, paradigms and worldviews that are always present in large socio-political infrastructures like the public sector. Additionally, the methodology must accommodate the multidisciplinary nature of the research scope. In his study on complexity and multi-disciplinarity, Finkenthal (2008, p10) suggests that multi-disciplinarity offers new ways of studying complex systems through the adaptation of tools (methods) from different disciplines to form new holistic tools. He argues that a holistic approach may be the only route to dealing with today's complexity, but it must be an approach that, within holism,

accommodates the interplay of the various parts of the whole. He quotes the quantum physicist David Bohm's **Theory of Implicate Order** – that things such as particles, objects and subjects, exist as semi-autonomous, quasi-local features of a wider activity. Bohm proposed that there is always a choice to be made of viewpoint for the researcher between *localness* and the wider activity:

> "There are two principles – the wholeness of the whole and the parts and the partiality of the parts and the whole… we must adopt both principles but say which is ultimate. That's where the choice takes place." (Bohm, 1987, p51)

These are important matters in the selection of methodological tools. Dealing with complexity and uncertainty is clearly of significance to success in strategic social research and Finkenthal's reference to holism is a powerful indicator of the way forward in methodology selection. Bohm's reflection on the choice between the wholeness of the whole, researcher choice and the partiality of the parts touches a fundamental reason for the research as articulated in the Research Hypothesis – the potential dialectical tension between an institutional paradigm and the digitally-based user-centred paradigm. To understand the extent of this challenge close attention will need to be paid to the forms of the exchange relationships that take place between the user and physical collection and the user and digital artifact; together with the behaviours and expectations of individuals interacting online with digital resources in their daily lives. These must be compared and scaled into general patterns for comparison. This tension between the atomic and the holistic and its importance to understanding is reflected in Gadamer's hermeneutic rule:

> "…the movement of understanding is constantly from the whole to the part and back again. Our task is to expand the unity of the understood meaning centrifugally. The harmony of all the details with the whole is the criterion of correct understanding. The failure to achieve this harmony means that understanding has failed." (Gadamer, 1989, p291)

Reflecting the evidence above and the wider views of writers reviewed (Horgan, 1997; Schwandt, 2001; Robson, 2002; Kumar, 2005; Denscombe, 2007; Blaikie, 2007) it is possible to define key criteria for the selection of approaches and methodological tools:

- When gathering and documenting evidence it will be important to contextualise the meaning of the experiences and behaviours, positioning them in a wider frame of relationship and complexity.
- The research trajectory will be to analyse and synthesise the evidence to create and refine working hypotheses not immutable empirical facts.
- Theory is based on emergent concepts from data rather than *a priori* theory;
- The research will use qualitative methodologies.

2.3.3 EVIDENTIAL SOURCES

Research within a social science setting frequently involves ethnographic methods such as observation, participation, interview, questionnaires, focus groups and participant narrative (Blaikie, 2007; Robson, 2002). Such approaches provide direct evidence of individual and group

behaviours, attitudes and relationships that may be synthesised to gain understanding of the norms, values and priorities of groups, organisations or communities. These ethnographic methods can be highly resource intensive due to the immersive engagement necessary to build meaningful understanding. Consequently, studies using fieldwork techniques in social situations tend to focus on small, well-defined groups or communities, use teams of ethnographic researchers, or sampling techniques (Denscombe, 2007; Hammersley and Atkinson, 2007). They are also time-consuming processes. In Van Maanen's words (2011, p220), "The unbearable slowness of ethnography – from 'getting in' to 'getting out' to 'writing it up' – is an enduring feature of the work". Additionally, where questionnaires, focus groups or futuring tools such as Delphi or scenario planning are employed it is essential that significant care be taken to develop clear and relevant questions and structures with which participants are able to understand and engage (Benn, Dunphy and Griffiths, 2014).

For this research there are two inter-related reasons why these traditional methods are not practical. They are the size of the meta-system that is collecting institutions and translation of the Research Hypothesis into a form amenable to use in Delphi, questionnaires or focus groups:

i) The scale of the meta-system: The research seeks to gain evidence from all collecting institutions in the public sector, together with those in receipt of public grant aid. There is no accurate figure of the total number of museums, libraries and archives falling within the meta-system; however, from various sources an estimate may be made. For libraries, the number of public library authorities is known (205), together with the number of academic library services (126). For museums, the Arts Council England's list of Accredited Museums includes 1,730 institutions (Arts Council England, 2015). **Listening to the Past, Speaking to the Future** (MLA, 2004, p72), the most comprehensive survey of archives since 2000 ,estimated that there were over 2000 archives in the UK. A percentage of these were archives in private organisations, so for this calculation an estimate of 1,000 publicly supported archives is used. Thus, a conservative estimate to define the scale of the meta-system is 3,000 separate institutions. Within this total the three classes of institutions include various sub-classes:

a. Libraries: public (with different policy frameworks in each of the four Home Nations), national and university.
b. Museums: national, regional, university, local, independent (each again with policy variations across the Home Nations).
c. Archives: national, record offices, local history, community based.

Note that school and further education libraries are not included due to lack of useful data on totals. As a point of departure for the definition of the total constituency of the meta-system there are 12 sub-classes to be considered. Additionally, as stated in the list above, for a number of the sub-sets of institutions within the meta-system, policy is located separately with the four Home Nations, reflecting Bohm's "partiality of the parts" (Bohm, 1987). In simple arithmetical terms the list presents 37 sub-classes of institutions, although with very detailed investigation

that figure might be more, dependent, for example, on the extent that different sub-classes share the same origins and development trajectories. Additionally, within these sub-classes there are various different roles and possible perspectives, such as practitioner, manager, policymaker. As a consequence it is unlikely that contemporary understanding of service paradigms and approaches to innovation might be achieved using observation or interviewing techniques since any meaningful sample size would, even at a minimum level, involve contact with many hundreds of people across the whole of the UK.

ii) How to model and communicate the intentions of the Research Hypothesis: The Hypothesis calls for evidence to compare current priorities, practices and preparedness of collecting institutions against the socio-technical drivers of the Internet (see Table 1.3). This requires a multidisciplinary approach, gathering and synthesising evidence from both the inner world of collecting institutions and the outer world in such a way that it is possible to make meaningful comparisons. The outer world evidence is developed from literature review focused on the themes of change reflected in the literature, not to define a range of hypothetical future trends, rather to decipher the unique identifying characteristics of the Internet: its *DNA*. To engage with involved actors through ethnographic tools such as questionnaires or focus groups would require different formulations for different groups of actors, but more importantly the building blocks on which such tools must be built are actually the outcomes that the research seeks to achieve.

Published research on the attitudes and values of practitioners within traditional public sector structures indicates that reflection on the possibilities of radical change is far from a routine activity (Schön, 1973,1991; Mulgan, 2009; Chapman, 2004; Ison, 2010; Egeberg, 2007; Seddon, 2008). Moreover, given the financial pressures on service sustainability, those same practitioners might well consider that an evolutionary progression into the digital space is the only practical option. Extensive personal experience working with collecting institutions suggests that both institutional structures and practitioner value systems tend to inhibit reflection on how the organisational mission might be achieved in radically new ways. This observation is reported in a number of documents considered in later chapters:

- Lack of response to radical studies about the future: Academic Libraries of the Future (Chapter 8.5), Museums in the Digital Age (Chapter 9.11).
- Lack of understanding of what digital innovation might offer: Envisioning the Library of the Future (Chapter 8.10), Museums Journal Round Table Discussion (Chapter 11.2).
- Lack of interest in radical perspectives of the future: Museums Association's Transformers programme, CUKT Library Lab programme (Chapter 11.6.3).

All of these factors seriously challenge traditional ethnographic approaches in a research domain that is both large and diverse both in constituency of organisations and multidisciplinary in the scope of evidence required. These are the kinds of situations where holistic methods are required to maintain consistency in the face of complexity (Finkenthal, 2008). The approach selected to address this systemic level approach is the use of documentary evidence - research

resources, policy and strategy documents and institutional mission statements - to provide a more consistent and overarching set of evidence. Chapter 3.3 describes the methods used to select evidential sources and in subsequent chapters of Part Two the range and relevance of documentary evidence is explained.

2.3.4 **METHODOLOGICAL TOOLS**

Section 2.2 made clear the purpose of the research is to compare the activities of collecting institutions with the impact of the Internet on society by analysis of present structures, processes and social effects. Then, from the evidence of the present, to highlight challenges and opportunities that collecting institutions are likely to face in the future and suggest ways in which maximum value might be achieved for society. Crotty (1998, p5) identifies three umbrella methods commonly used for interpretive research - symbolic interactionism, phenomenology and hermeneutics - within each of which there are a variety of approaches. In this research three closely linked methods will be used - phenomenology, hermeneutics and organisation theory; described briefly below, followed by a summary of their use in the various stages of the research.

i) **Phenomenology** rejects the positivist's objectivity, "…arguing that things are never things in themselves, but always things as something for someone*"* (Holt and Sandberg, 2011, p218). Awareness of objects/phenomena arises from the particular meaning that the object has for the subject. Husserl, a leader in the development of phenomenology in the early part of the 20th century, described this as "intentionality" – a relationship of meaning (Husserl, 1970, p168). He argues that to understand the world conscious experience must be reflected (Husserl, 1931); mind and matter are inseparable (McCall, 1983, p61). People are "beings-in-the-world" (Spinelli, 2005, p1). Wolff generalises this analogy:

> "Phenomenology asks us not to take our received notions for granted, but…to call into question our whole culture. Our manner of seeing the world and being in the world in the way we have learned it growing up" (Wolff, 1984, p192).

Husserl (1970) describes this transition from the dualism of the positivist epistemology to the *singular* dynamic of the relationship between the subject and as the *life-world* – the world opened by the subject. Within this *life-world* phenomenology seeks to break down the barriers. In Merleau-Ponty's words (2012, p xiv):

> "…in order to see the world and grasp it as paradoxical, we must break with our familiar acceptance of it."

Phenomenology, then, is a mechanism for obtaining evidence of the subject/object relationship. It seeks to challenge established understanding of phenomena (meaningful reality), setting aside the reification that derives from accepted symbol systems – the collective assumption of institutional value or utility, for example. Using phenomenological tools to, "…make us conscious of what the world was like before we learned how to see it" (Marton, 1986, p40). Across the last two decades there has been sustained interest in the application of phenomenological principles to research methods within the social sciences generally and

organisational studies particularly (Blaikie, 2007; Ehrich, 2005; Ilharco, 2008; McAuley and Johnson, 2007; Saunders, 1982; Zimmer, 2005).

Ehrich's 2005 paper provides a practical introduction to the application of phenomenology in management research. She cited Hein's caution that there is no set way to carry out phenomenological research since the specific method used depends on the purposes of the researcher, his or her specific skills and the nature of the research question and data collected (Ehrich, 2005, p3). However, by way of positive demonstration she identifies two prominent schools of thought on the application of phenomenology to research methods. These are *hermeneutic phenomenology* (van Manen, Utrecht School) and *empirical phenomenological psychology* (Giorgi, Duquesne School). She summarises the similarities and differences in a table, an extract of which is reproduced below:

Van Manen, Utrecht School HERMENEUTIC PHENOMENOLOGY	Giorgi, Duquesne School EMPIRICAL PHENOMENOLOGICAL PSYCHOLOGY
Influenced by 'human science pedagogy' and the Dutch movement of phenomenological pedagogy	Used the insights from phenomenological philosophy to develop a human science approach to psychology
Aim is to produce insights into human experience	Aim is to produce accurate descriptions of human experience
Outcome is a piece of writing which explicates the meaning of human phenomena and understanding of the living structures of meaning	Outcome is a general structural statement which reflects the essential structures of the experience being investigated
May use 'self' as a starting point; relies on others and other sources (i.e. fiction, non-fiction, observations, etc.) of data	May use 'self' as a starting point; but relies mainly on others for data
Uses less prescriptive methods of doing research	Follows a fairly strict method of data collection and data analysis
Is not inductively empirically derived	Is an empirical analytic science

Table 2.1 *Comparison of two contemporary approaches to phenomenology in research (adapted from Ehrich, 2005, p4)*

Given the intrinsic tractability of phenomenological principles (see Ehrich's comments above) it is important to hold in mind other practical examples of phenomenologically-based research. In his paper Ilharco (2008, pp61-81) describes the use of a six-stage process, while in their review of phenomenology and organisation theory Holt and Sandberg (2011, p235) document a wide range of research projects addressing issues such as change, strategy, structure and technology.

ii) **Hermeneutics** has already been referred to above in Gadamer's reference to the constant movement from the "whole to the part and back again", in the current context as a fundamental means of relating the fine granularity of observation with the broader patterns that may be defined by a holistic perspective. Hermeneutics, as an approach to the analysis and understanding of religious texts, has been in use for many centuries. During the 20th century it was adopted as a technique of understanding in other disciplines and in recent years has been particularly associated with systems theory (Ramage and Shipp, 2009). Systems theory

consists of a range of holistic methodological tools across the whole of the epistemological continuum. In its positivist form it has been applied to complex scientific and engineering problems while interpretive techniques are available to address soft socio-technical situations where a variety of perspectives must be considered and modelled (Emery and Trist, 1960, p83). Within the context of complex soft systems Reynolds and Holwell (2009, p7) also suggest strong links with the principles of phenomenology described earlier:

> "There is now agreement amongst systems practitioners that systems are ultimately conceptual constructs, and as such contemporary systems approaches can be regarded as belonging to the constructivist tradition. In short, systems are constructs used for engaging with and improving situations of real world complexity".

Peter Checkland, one of the thought leaders in the development of soft systems techniques considers that the principles of hermeneutics and phenomenology are the foundations in which these newer systems methods have been built (Checkland, 1999, p281).

iii) **Organisation theory.** The management of multidisciplinary research that embraces a wide range of interlinked organisations, structures, processes, behaviours and effects carries the risk of failure to demonstrate clearly the commonalities and relationships across what may appear from the outside a bewildering bricolage (Duymedjian, 2010, pp131-151). Organisation theory offers a means of managing such risks, using the methods and methodologies of organisational ethnography and phenomenology to develop the theoretical concepts that can aid coherent structuring of the internal dynamics of organisations and their interactions externally (McAuley and Johnson, 2007). While organisational ethnography enables the description of observed behaviours (Neyland, 2007, p115), phenomenology provides the means to dig below the surface of those behaviours to understand the fundamental forms of the subject/object relationship. Organisation theory offers a body of knowledge and a language system that is consistent with the chosen methodology, while making possible the grounding of all components and evidence into a common framework, "…of general propositions about organisations" (Starbuck, 2005, p143), a toolkit of concepts and approaches that make possible the ordered study of the nature of structures and the factors that influence their activities. In Pugh's words (1984, p6) organisation theory is:

> ". . . the study of the structure, functioning and performance of organisations and the behaviour of groups and individuals within them . . . [in order] . . . to distil theories of how organizations function and how they should be managed."

Neyland (2007, p115) lists a range of ethnographic approaches of which virtual ethnography, embracing the use of the Internet as an ethnographic tool and the impact of the Internet on social groups and organisations, is particularly relevant to this research:

> "…initial contact with an organisation can often occur through a website. Ethnographers should recall that the ways in which an organisation is first encountered, the face the organisation portrays to the outside world, can be an important constitutive element of an organisation's identity."

Van Maanen (2011, p221) argues that the key value of organisational ethnography in support of

wider organisation theory is its ability to highlight cultures within organisations:

> " Culture simply refers to the meanings and practices produced, sustained and altered through interaction, and ethnography is the study and representation of culture as used by particular people, in particular places, at particular times. More important perhaps is not what culture is (and the semantic elasticity surrounding the concept) but – and in keeping with pragmatic principles – what culture does. And what it does most critically is the work of defining words, ideas, things, symbols, groups, identities, activities and so forth."

Certainly, within this institutional analysis understanding of the various groups and organisational cultures (and their web presence) will be important to understanding purpose, relationships and commonalities and the extent to which organisational or individual actors have the ability to control, influence or change the processes around them.

2.3.5 APPLYING THE METHODOLOGICAL TOOLS

Three elements of the interpretive/realist epistemology have been identified - phenomenology, hermeneutics and organisation theory - all of which are linked by the need to gather evidence of relationships and behaviours and by the task of defining broader patterns through synthesis. With regard to the first two elements, the van Manen model of hermeneutic phenomenology (van Manen, 1990) as summarised in Table 2.1 is used in all aspects of the research in this thesis. The focus of outcomes based around descriptions of the meaning of human phenomena and the living structures of meaning fit with the intentions of this research. In terms of applying a practical set of steps to track the use of the methodology, a study by Ajjawi and Higgs on the learning behaviours of medical practitioners (Ajjawi and Higgs, 2007) provides a helpful structure for the application of the research process that fall in three stages. First there is the establishment of data collection methods, second the process of actually acquiring evidence of adequate range and comprehensiveness, and thirdly there is the process of data analysis. Ajjawi and Higgs present this latter stage as a list of six activities that lead on to the outcome as "themes and stories":

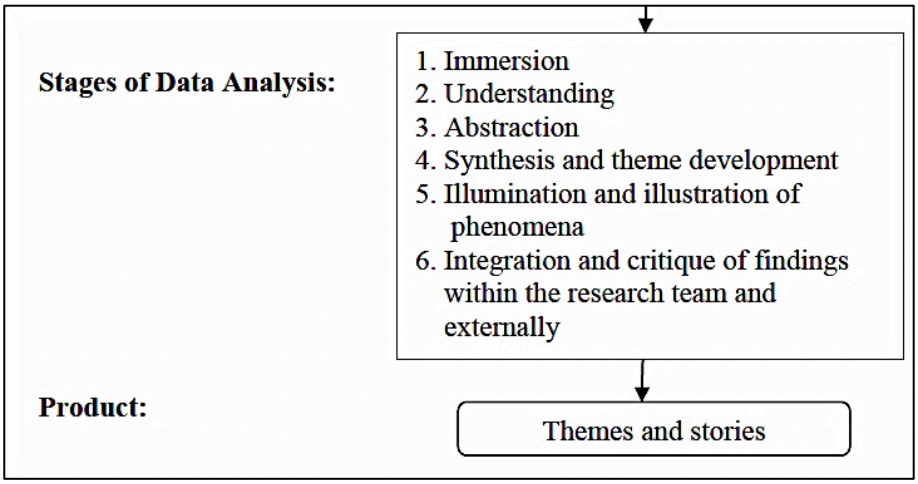

Table 2.2 *Hermeneutic phenomenology data analysis stages (Ajjawi and Higgs, 2007, p614)*

Part Two of this thesis examines evidence relevant to the Research Hypothesis. Ajjawi and Higgs refer to this as the creation of "first order constructs" (Ajjawi and Higgs, 2007, p622) enabling basic understanding through the capture of meaning. This evidence, presented as a series of narratives in Chapters Four to Eleven, represents the raw material of the *lived experience* derived from a range of documentary resources relevant to the relationship between collecting institutions and the Internet. Summaries within and at the end of each chapter provide reflective assessment and comparative analysis of themes common to all collecting institutions[12]. These summaries represent the abstraction of first order constructs synthesised into more systemic "second order constructs" using "…the researcher's theoretical and personal knowledge" (Ajjawi and Higgs, 2007, p624). These stages are 1, 2 and 3 in Table 2.2. Part Three focuses on stages 4, 5 and 6. Synthesis, stage 4, represents the more structured aggregation of common themes through iterative analysis of the original evidence and processes of reflection. Illumination and illustration of phenomena, stage 5, relate to the modelling described in the thesis's Research Objectives and, finally, stage 6 represents the validation process - "critique of findings". These are presented in Chapters Thirteen, Fourteen and Fifteen. The implications of the outcomes complete the thesis as Chapter Sixteen. The other element of the methodology - organisation theory - underpins the review of collecting institutions within the public sector (Chapter Six) and the synthesis tasks described in Part Three, and all of the three elements of the methodology are drawn together in Chapters Fifteen and Sixteen to present a systemic view of how and why collecting institutions should develop a shared strategy for their digital future.

2.4 DEALING WITH RISK

> "…in crude terms, the social sciences begin with a head start over the natural sciences, but instead of running straight ahead in pursuit of new knowledge they move around in small circles and spend a lot of time re-inspecting the starting blocks." (Outhwaite, 1987, p54)

The biggest risk for the research, as Outhwaite suggests, is mission drift: failure to maintain momentum towards outcomes, spending too much time identifying phenomena without shifting to a holistic level revealing generic patterns. This is echoed in the concern of Duymedjian (2010), in Section 2.3.4iii, that multidisciplinary organisational research risks not a coherent picture, but a bewildering bricolage. The adoption of a clear set of objectives and stages, each with distinct boundaries and predefined links between one stage and the next, provides a structured approach throughout the research. Additionally, linking evidence across different resource and institution types, where appropriate using simple scorecard techniques, provides mitigation of the risk at each stage of the research, while the use of organisational ethnography supports progression from the *bottom up* towards more comprehensive understanding. Risks may also be identified in two constraints arising from the chosen methodological approach:

[12] Extracted summaries are provided in the appendices of Chapter Twelve.

i) **Boundaries of the evidence.** Multidisciplinary research that seeks to identify shared patterns across different institutional forms must impose limits on the scope of evidence that may be considered. The very significant range of evidential sources available demands filtering to maintain focus on the core intentions of the research. For the various documentary forms - mission statements, policy and strategy, and research studies - the boundaries are defined in the relevant chapters through the thesis. For example, the focus on strategy and research from 2000 since this represents a *watershed* for the social impact of the Internet and, for the mission statement analysis, providing a generic definition of what might be accepted as a mission statement. The focus of the research is UK institutions however, in some cases, where appropriate, evidence from the US and Europe is used to highlight particular phenomena.

ii) **Longer-term effects of focusing on documentary evidence**. Section 2.2.3 described the reasons why the research focuses on documentary evidence rather than direct participation of actors through structured interviews, questionnaires, Delphi techniques or scenario planning. Such an approach, while justifiable for the research, presents the risk that those actors might challenge the approach if the outcomes of the research propose radical change. The key element of mitigation for this risk is the clear presentation of compelling evidence on why the Research Hypothesis is valid and the opportunities for collecting institutions of any radically new approach proposed.

2.5 CHAPTER SUMMARY

Chapter Two has described and justified the epistemological framework for the research and the methodological perspective and tools to be applied. The research domain deals with social systems and therefore the epistemological approach is interpretive, seeking to *understand* (verstehen) the nature and causality of the actors, processes and relationships within the social systems and the symmetry that might exist across them. The theoretical perspective is social realism and the methodologies used are hermeneutic phenomenology and organisation theory, particularly in the form of organisational ethnography.

PART TWO
Social Analysis

CHAPTER THREE
Introduction to the Social Analysis

3.1 CHAPTER PURPOSE

Part Two focuses on the tasks associated with Primary Research Question One (Table 1.3) concerning the Social Analysis of both the inner world of collecting institutions and the outer world in which they exist and interact:

1. To identify the emergent differences and commonalities between the missions and paradigms of collecting institutions and the evolving Network Society.
2. To examine the readiness potential (Bereitschaftspotenzial) of collecting institutions to respond to a changing environment.

Table 3.1 *Social Analysis tasks*

This chapter introduces the range of actions associated with these two tasks, defined by Research Objectives Two to Five:

RO2	Identify the key supply-side trends that are likely to impact on collecting institutions' ability to provide effective services in the digital space
RO3	Identify the key demand-side trends that are likely to impact on collecting institutions' ability to provide effective services in the digital space
RO4	Identify the form, components and priorities across collecting institutions that define and direct existing service propositions
RO5	Review examples of the development of digitally based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change

Table 3.2 *Social Analysis Research Objectives*

3.2 SOCIAL ANALYSIS IN CONTEXT

The research focuses on the shared opportunities and challenges of the Internet for collecting institutions. This requires gathering evidence of contemporary phenomena and historical influences to demonstrate the extent to which there are similarities and differences of purpose, methods and service priorities in the inner world of collecting institutions. To understand that evidence within the context of socio-technical change of the outer world, wider trends and their impact must be examined. In Part Three, these two perspectives are compared to reveal the opportunities and differences. Traditionally, the concepts of public and private value have been clearly differentiated:

> "In the private sector these key questions (of value) are answered when individual consumers stake their hard-earned cash on the purchase of a product, and when the price paid exceeds the costs of making what is sold. These facts establish the presumptive value of the enterprise. If individuals do not value the products or services

> enough to pay for them, they will not buy them; and if they do not buy them, the goods will not be produced. In the public sector, however, the money used to finance value-creating enterprises is not derived from the individual, voluntary choices of consumers. It comes to public services through the coercive power of taxation." (Moore, 1995, p30)

The Internet has changed this difference in two ways. First, since the single, ubiquitous channel that is the Internet has enabled non-public sector organisations to develop services that compete or at least challenge the previously monopolistic status of public service and second, the private sector continues to generate major Internet innovations that drive trends in online user behaviours and expectations, the effects of which are just as relevant to the public sector as the private sector. The expectations of 24/7 user-friendly access and personalised transactional services are as relevant to Whitehall and the Town Hall as to the High Street. The differentiation of public and private online service propositions becomes increasingly indistinct.

Understanding future possibilities must begin by building a picture of the *now* in relation to the institutions and the wider factors that influence them. In Part Three the synthesis and modelling trends will lead to deeper understanding of strategic possibilities through reflection and new ways of thinking based on the evidence gathered in Part Two.

Methodologically, hermeneutic phenomenology underpins the processes of evidence gathering, while in considering the significant effect of structure within the public sector, organisational ethnography is also applied. Throughout, a simple systems model is also used to disaggregate the various components of the value flow from organisation to user/customer. Within economics, the laws of supply and demand are fundamental to understanding how markets might behave (Ehrbar, 2008). While that dynamic is not directly relevant to this research, the differentiation of supply and demand is useful both to this stage of analysis and also for subsequent synthesis and model building since it enables focus on the increasing importance of the boundary exchange between service and user. The nature of this relationship can be best explained using one of the most basic systems diagrams, the Open Systems Transformation Model:

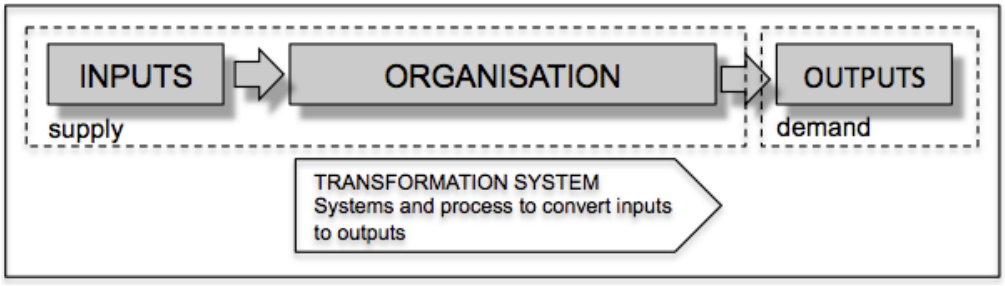

Table 3.3 *Open Systems Transformation Model (adapted from Kast and Rosensweig. 1974)*

The diagram shows the organisation as an agent of transformation taking in resources and producing outputs (services, commodities) that meet customer need. The *demand* side in this version of the model is intended to represent not the tangible product of the organisation, but the exchange that takes place between the organisation and the customer – defined normally as the relationship between the value delivered to the customer and the value returned to the

organisation. Traditionally, so long as collecting institutions operated in quasi-monopolistic mode, without significant interplay between private and public service provision, change was incremental and its diffusion slow. Institutions might discount the effects of external changes in supply and demand over the short to medium term, adopting and adapting when clear benefit to public value could be demonstrated (Lane, 2000).

Part Two provides evidence against which to judge whether such an approach is still relevant. It examines the extent to which the boundary between public and private becomes blurred as the public sector monopoly is increasingly challenged by non-public suppliers and as rapid innovation and reduced transaction costs open up new market opportunities (Coase, 1937; Naughton, 2013).

3.3 EVIDENTIAL SOURCES

A general survey of digital innovation and its social impact risks being *research without boundaries*. The documentary landscape encompassed by this multidisciplinary research is both rich and diverse, ranging across socio-technical change, public and private sector structures and innovation, policy and strategy documents for collecting institutions and research papers both on highly specific themes or embracing the whole of the collecting institution meta-system. It is therefore essential to provide boundaries for the research and methods that explain how selection has been made from the extensive body of published material.

Part Two addresses the literature for three different perspectives, derived from the Research Hypothesis and summarised in the two questions in Table 1.3:

- The socio-technical drivers of the outer world: "...the evolving Network Society" (Chapter Four).
- The organisational and operational realities of collecting institutions within public policy structures (Chapter Six).
- Strategic planning, future studies and research evidence of innovation and change across collecting institutions (Chapters Eight to Eleven).

While each of these perspectives is underpinned by different sets of documentary sources, it is important to apply a consistent approach to the identification of relevant material and their selection. For each of the three elements, the processes below are followed:

3.3.1 **CHAPTER STRUCTURE AND SCOPE**

There are two factors relevant to definition of the scope and structure of chapters. The point of departure is the knowledge and experience of the researcher, described in Chapter 2.3.3. The researcher worked at many levels of government in England over extended periods and has spoken and presented widely during the past 20 years on the future relationship between collecting institutions and the evolving Network Society. He has also contributed a number of articles and chapters to academic and professional journals and books. These activities have provided rich practical experience and knowledge of the literature across the whole spectrum of the research domain; knowledge and experience that has, of course, been used in the creation

of the Research Hypothesis and the Research Objectives, but is equally relevant to understanding how the various chapters should be structured. The second factor is the inclusion of the Research Objectives at the beginning of each chapter, allowing a clear scoping statement of what the chapter aspires to achieve.

3.3.2 DOCUMENT DISCOVERY

Establishing the scope and structure makes possible the definition of suitable search topics. Topics and terms were then applied in the following way:

- Review of existing resources included in a Mendeley[13] database of 1000+ plans, reports and journal articles and 450+ monographs in a Zotero[14] database. This both disclosed directly-relevant material and also useful citations to be traced.
- Search using University College London library's online Explore service, in some instances with defined time spans.
- Where appropriate, search Library and Information Science Abstracts for library and archives resources not included in Explore, applying the same search terms.
- Search also in Museums Practice and Museums Journal.

3.3.3 FILTERING AND SYNTHESIS

The range of evidence gathered is then used to enable synthesis and filtering within each of the sub-headings of the chapter's structure. Selection of material to be referenced or cited within the text is chosen to ensure that key themes are justified and alternative views presented when a balance needs to be shown. This process of filtering, synthesising and drafting the narrative is supported by constant reflection on both the Research Objectives and the structure of the chapter itself, revisions being made as necessary.

At the beginning of each of the three documentary review perspectives the structure is explained, the search terms and themes summarised, numbers of useful hits stated and comments made on the classes of material excluded.

[13] Mendeley website: Available at: www.mendeley.com [accessed 23rd October 2014]
[14] Zotero website: https://www.zotero.org [accessed 23rd October 2014]

CHAPTER FOUR
Literature Review: Digital Innovation and Social Change - Key Trends

4.1 CHAPTER PURPOSE

The purpose of Chapter Four is, using contemporary literature (both academic and popular), to examine the broader technical and social landscape in which collecting institutions are a small part[15]. The chapter addresses Research Objectives Two and Three:

DIGITAL SUPPLY AND DEMAND: KEY TRENDS IN THE OUTER WORLD CHAPTER FOUR	
Objective	**Scope**
RESEARCH OBJECTIVE 2 Identify the key supply-side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space	• Nature and impact of new content formats and supply chains • New public sphere service propositions external to public sector provision and their channels of delivery • New business models and approaches to innovation • The emergence of contestable markets where previously the public institution was a monopolistic provider • The dynamics of change and its effect on other market sectors
RESEARCH OBJECTIVE 3 Identify the key demand-side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space	• User behaviour in the adoption and use of digital technologies and service; the importance of time constraints • Review service design from the user perspective
METHODS: Literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 4.1 *- Scope of Chapter Four*

4.1.1 CHAPTER SCOPE AND STRUCTURE

The scope of Research Objectives Two and Three sets the boundaries of the chapter. The aspiration is to identify a small number of attributes in the outer world that represent the unique drivers of social-technical change. There is no intention to identify long-term trends to be used to present possible futures for collecting institutions, although patterns of innovation and change may both provide indicators of priorities worthy of consideration. Rather the intention is to evince from phenomena the key characteristics that define *how* and *why* innovation and change take place. These drivers will be used in Part Three to compare against the evidence on collecting institutions' service paradigms, explored later in Part Two.

The chapter's structure is based on the researcher's prior knowledge of the wider social

[15] This aspect of the research was undertaken during the second half of 2013.

landscape manifested in the supply and demand relationship of the Open Systems Transformation Model (Table 3.3). Supply side sections (4.3) consider new business models and markets, innovation, and channel convergence while demand side sections (4.4) examine the reach of the Internet, patterns of use and impact on behaviours and expectations.

4.1.2 DOCUMENT DISCOVERY

Using the approach described in Chapter 3.3.2 a total of just over 250 pertinent documents were located. Approaches to discovery vary across the chapter sections depending on the particular purpose and the known relevance of documents. For example, section 4.3.2 (New Business Models, New Markets) is amenable to the definition of concepts such as online marketing, Internet marketing, online retailing, Internet business statistics, online market surveys, innovation, communication theory, social media and Web 2.0, together with specific review articles on the transformational case studies cited. All of these concepts are used as part of the discovery process. Additionally, given the global impact of the Internet, relevant documents from developed countries beyond the UK are included, and the Internet's wide impact requires the examination of popular, mass-market resources alongside academic documents. A similar approach is applied to the other sections of 4.3. In section 4.4 where the focus is on behaviours and expectations within the UK there exist a small number of comprehensive sources that provide a rich picture of the effects of socio-technical determinism.

4.1.3 FILTERING AND SYNTHESIS

The purpose of Chapter Four is to articulate a limited number of drivers of innovation and change justified by analysis of the literature and illuminated by practical examples of outer world innovation and change. The structure of the chapter sets out key aspects defined by the researcher's knowledge and experience and this framework forms the foundation for a process of document distillation. The Open Systems Transformation Model, focusing on supply, demand and the effects of their interaction, provides a simple but powerful mechanism for brigading and selecting material. It ensures the exclusion of all material that focused on the technical operation and management of networks and digital assets. Also, in its focus on processes and outputs in the present, the Model (and the intentions of the chapter) avoids the need to consider studies on long-term effects and possible future trends. The primary purpose of this literature review is to examine *how* and *why* Internet innovation and change occurs, not to review what future outcomes might be.

4.2 BACKGROUND

> "The eighteenth-century Republic of Letters had been transformed into a professional Republic of Learning, and it is now open to amateurs, amateurs in the best sense of the word, lovers of Learning among the general citizenry. Openness is operating everywhere, thanks to "open access" repositories of digitized articles available free of charge, the Open Content Alliance, the Open Knowledge Commons, OpenCourseWare, the Internet Archive, and openly amateur enterprises like Wikipedia. The democratization of knowledge now seems to be at our fingertips. We can make the Enlightenment ideal come to life in reality… Yet this is also a tipping point in the development of what we call

> the information society. If we get the balance wrong at this moment, private interests may outweigh the public good for the foreseeable future, and the Enlightenment dream may be as elusive as ever." (Darnton, 2009)

As a cultural historian specialising in the French Enlightenment period, Director of Harvard University Library and as a prime mover of the Digital Public Library of America project (Darnton, 2010), Darnton is better qualified than most to draw attention to the opportunities and challenges presented by digital technologies and networking. There are two particular reasons why his voice should introduce this section. As cultural historian he is able to remind us that this is not the first time in history that the landscape of knowledge and learning has entered a period of re-alignment and change. He makes the point that the creation of the modern view of the world that emerged from the turbulence of the 17th and 18th centuries, that was itself a product of the invention of printing and the industrialisation of the written word two centuries before, made feasible universal education as enshrined, in the UK, in the 1870 Elementary Education Act (Porter, 2000, Ch.15; Rose, 2001, Ch.5). The second reason is that while today the networking of knowledge and information may be opening up fresh vistas for individuals and for communities, without prompt and strategic action on the part of those passionate about the 'openness' of knowledge and learning there is risk that public value will be drowned by private interests; the boundaries between public and private becoming increasingly blurred.

Collecting institutions are at the heart of knowledge and learning, yet they are only a small part of a global landscape of digital innovation and social change. It is therefore important to examine key aspects of this broader landscape. Without identifying outer world trends at a macro-level it is impossible to make long-term plans for the effects of the digital changes that are already impacting many aspects of our society. Darnton uses the word 'transformation' to describe the changes that digital technologies are enabling, offering the potential to "…make the Enlightenment ideal come to life". The maturing of the modern view of the world, based on rational, scientific methods, may be traced across at least two centuries (Hill, 1991; Porter, 2000) and it has been argued that the roots of the Enlightenment stretch back to a technological innovation – the invention of the book as a tool of mass communication – in the mid-15th century:

> "…printing broke the class monopoly of the written word and it provided the common man with a means of gaining access to the culture of the world". (Mumford, 1947, p91)

Darnton's immediate concern is that the speed of the transformation that society faces today – "the Republic of Learning" – is dramatically quicker than the "Republic of Letters"; decades rather than centuries. It is a remarkable fact that the engineering principles of design and production of the printed book remained fundamentally unchanged between the production of Gutenberg's 42 Line Bible[16] around 1455 and books today. Production processes have changed, as have business models and market scale, but the basic design principles remain. It

[16] Now only available to all but the most serious scholar through digital technology. Available at: http://molcat1.bl.uk/treasures/gutenberg/search.asp [accessed 30th April 2012]

is equally remarkable that within the space of just a few years we are no longer surprised by people in the street oblivious to everything but their smartphone, or commuters on a train watching movies, listening to music or reading books on tablets. Or that more and more people rely on satnavs to find the quickest route when driving, and rely on information accessible from the Internet, treating it as though it were something as invisible and trusted as water from a tap.

Darnton's words, therefore, underline both the purpose of this chapter and the need for the research. He senses radical change ahead for institutions involved with knowledge and learning. Change that is just one part of the shifts taking place in commerce and society, in the opportunities for individuals to interact with online services whenever and wherever they wish and in the way that social structures and relationships are able to form and reform in the digital space. This is not the first occasion that our society has faced the uncertainty of a period of radical change, whether the slow-burn industrial revolution, the more rapid commercial and social upheaval created by railway mania in the 1830s and 1840s (Biddle and Simmons, 1997), or the effects of national crises, for example radical social transformation during and following World Wars (Hennessy, 2007; Kynaston, 2010). In each of these cases the effects were permanent and each has had, in one way or another, lasting effect on the roles and operation of collecting institutions. The drive for universal education in the 19th century raised the importance of museums and libraries while those institutions together with archives played key roles in the social democracy that developed after the Second World War. Over the long histories of collecting institutions, such changes have tended to be evolutionary, measured in decades. Examples include libraries increasing open access to collections from the start of the 20th century, museums developing formal education and learning programmes, and more recently archives popularising their collections online from the 1990s with the growing interest in local and family history.

Today, for digital development, a steady incremental approach to change may not be appropriate. The rate of change and the degree of social and economic impact that the *digital revolution* is having across the globe gives urgency for effective strategic planning. Successful organisations must do more than simply consider the relationship with their users using traditional service propositions. The behaviours and expectations of citizens have changed dramatically over the past ten years and under the influence of rapid technological innovation and its diffusion, radical change may be the default position for long into the future. Additionally, the traditional distinction between supply and demand has begun to break down. The following sections of this chapter consider a range of issues associated with the nature and effects of digital innovation and networks. Key trends will be identified from the evidence that will be used in the synthesis of Part Three.

4.3 DIGITAL INNOVATION

4.3.1 **TOWARDS THE NETWORK SOCIETY**

> "Communication technologies have constructed virtuality as a fundamental dimension of our reality. The space of flows has taken over from the logic of the space of places,

> ushering in a global spatial architecture of interconnected mega-cities." (Castells, 2010, xliv)
>
> "And, thus, the seemingly unstoppable growth at Google where, in the second quarter of 2006, revenue surged to almost two and a half billion dollars. What happens you might say when ignorance meets egoism meets bad taste meets mob rule? The monkeys take over. Say goodbye to today's experts and cultural gatekeepers – our reporters, news anchors, editors, music companies and Hollywood movie studios". (Keen, 2007, p9)

Castells, an academic who has researched the social and strategic effects of networking for many years, argues that new forms of social and technical structures have emerged as individuals, communities, nation states and the global community adjust and re-invent themselves in the "space of flows". Keen, who takes a strongly dystopic view of the effects of the Internet, argues passionately for all that is being lost as technology increasingly defines our behaviours and the opportunities available to us. It is not the purpose of this chapter or of this research to make judgments about the differing opinions expressed. It is, however, important that they are not ignored. Despite contrarians like Keen above or Morosov's argument that global services such as Facebook and Google risk undermining democracy by imposing authoritarian constraints on people's behaviours (Morosov, 2012), it seems inconceivable the socio-technical deterministic advance of the Internet will be reversed to return to pre-digital days. Equally, the optimistic views of writers such as Leadbeater (2009) or Shirky (2008, 2010) should not lead to the denial of potential future challenges, or acceptance that only technological innovation and *the crowd* will lead progress.

The **Oxford Internet Survey** was first published in 2003 and in the latest edition (Dutton and Blank, 2013) presents a picture of UK trends over a ten-year period. Across what has been a dramatic period of technological innovation the data show consistent increases in the take up of the Internet in all aspects of people's lives. In each edition the Internet reaches further. More people, doing more things. The 2011 edition summed this up simply as:

> "The Internet has become an integral part of our lives and our society". (Dutton and Blank, 2011, p8)

The enormous changes that have been wrought over that ten-year period are examined in subsequent sections of this chapter, but first it is necessary to understand the fundamental nature of the changes that are taking place within societies around the world. Castells published the second edition of **The Rise of the Network Society** in 2000. In the conclusion to the 2010 revised edition he provided a definition of what for him constitutes a network society:

> "Networks constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and the outcomes in processes of production, experience, power and culture… Presence or absence in the network and the dynamics of each network vis-a-vis others are critical sources of dominion and change in our society: a society that, therefore, we may properly call the network society, characterised by the pre-eminence of social morphology over social action." (Castells, 2010, p500)

Here he confirms what he believed (in 2000) would be the extent of network effects on the social fabric. Networks would become the dominant agent of change. Later in that conclusion he provides a tangible and prescient example of what the shift between *power* and *flow* might mean:

> "Cultural expressions are abstracted from history and geography…Because information and communication circulate primarily through the diversified, yet comprehensive media system, politics becomes increasingly played out in the space of media. Leadership is personalised, and image-making is power-making." (Castells, 2010, p507)

This quote, which the reader may find resonates with the political landscape today, takes us beyond the conceptualisation of the Internet as a useful tool to support our current behaviours and interactions – a vital, but benign part of our lives – to be a ubiquitous, often invisible, agent of socio-technical evolution, even, perhaps, revolution. The idea of a two-way relationship between humans and invented things in social evolution is nothing new. In McLuhan's words, "we shape our tools, and thereafter, they shape us". Whether or not the quote actually originated from McLuhan, it certainly reflects his views expressed in **The Gutenberg Galaxy** (McLuhan, 1962). Section 4.2 pointed out how the creation of the printed word fuelled the Age of Enlightenment and subsequently universal education. More recent writers have expressed similar views in different forms. In **The Future: Six Drivers of Social Change** Al Gore reflects on the effects of globalisation. He borrows from Teilhard de Chardin's writings on the Global Mind[17] to describe the Internet today:

> "Just as Earth Inc[18] is changing the role of human beings in the production process, the Global Mind is changing our relationship with the world of information. The change being driven by the wholesale adoption of the Internet as the principal means of information exchange is simultaneously disruptive and creative." (Gore, 2013, p47)

Gore is describing the emergent network society as an ecology that embraces both humans and the technology together shaping their societies. Floridi, in his study on the future binary effects of the Internet on our lives, makes the following points:

> "During the past decade or so, we have become accustomed to conceptualising our life online as a mixture between an evolutionary adaption of human agents to a digital environment and a form of post-modern, neo-colonisation of the latter by the former. This is probably a mistake. ICTs are as much re-ontologising our world as they are creating new realities… Basically the increasing digital re-ontologisation of artefacts and of whole (social) environments suggests that soon it will be difficult to understand what life was like in pre-digital times (to someone who was born in 2000 the world will always have been wireless, for example) and, in the near future, the very distinction between online and offline will become blurred and then disappear. To put it dramatically, the infosphere is progressively absorbing any other space." (Floridi, 2007, p6 of preprint ed.)

Conflicting forms of time are something that Castells also examines in the 2010 re-issue of the

[17] de Chardin uses this phrase to describe his concept of the planetisation of consciousness within a technologically enabled network of human thoughts. (de Chardin, 1959).
[18] Gore's term for the integration of national policies, regional strategies and economic theories into a 'new hyper-connected, tightly integrated, highly interactive and technologically revolutionized economy'. (Gore, 2013, p4)

second edition of **The Rise of the Network Society**. Below he comments on the dialectical tension between what he refers to as “glacial time” – the slow-motion time that humans assign to their perception of evolution – and “timeless time”, as reflected in the 24/7, frenetic world of social networking and the breaking down of traditional social conceptions of work, rest and play. Time takes a different form when we are always connected to everyone:

> “Timeless time and glacial time embody the fundamental struggle taking place in the network society between the taming of the technological forces unleashed by human ingenuity and our collective submission to the automaton that escaped the control of its creators.”(Castells, 2010, xliii)

Others have also focused on the effects of what in now generally referred to as Internet Time:

> “An Internet year is like a dog year, changing approximately seven times faster than normal human time.” (Wellman, 2001, p.2034)

Karpf (2012, p639) provides a pragmatic demonstration of the degree and speed of change that has taken place since the turn of the Millennium:

> “Consider: in 2002, streaming video was rare, short and choppy. Wireless hotspots were a novelty. Mobile phones were primarily used for (gasp!) phone calls. Commercial GPS applications were still in the early stages of development. Bloggers could be counted by the handful. Social networking sites like Friendster, Myspace and Facebook were still confined to Bay Area networks and technologists’ imaginations. A ‘tumbler’ was a type of drinking glass; a ‘tweet’ was a type of birdcall. Simply put, the Internet of 2012 is different from the Internet of 2002. What is more, there is little reason to suppose this rapid evolution is finished: the Internet of 2022 will likely be different from the Internet of 2012.”

Given the take up of digital services over the past 10 years these comments seem self-evident. In mid-2013 over 50% of the UK population were owners of smartphones (Ofcom, 2013) and as every smartphone owner knows, the phone will be out of date within a couple of years and the apps that drive it will be lucky to survive without change for more than a few months. The same kinds of lifecycles are also apparent for tablet computers and the constantly shifting tapestry of social networking tools (Dutton and Blank, 2013). The very nature of time within our assumptions of living may be changing, almost unnoticed.

Karpf’s comments (2012, p639) come from a single-issue edition of the journal **Information, Communication and Society** (ICS) dedicated to reporting the results of a symposium led jointly by ICS and the Oxford Internet Institute in 2013 to consider the impact to date and the future of social research focused on the Internet:

> “The Internet is no longer a futuristic innovation that might shape society and economic development, but a clearly central aspect of contemporary network societies…Ten years is only a moment in the span of social research, but eons in Internet time.” (Loader and Dutton, 2012, p610)

The message from the symposium report is that while change may continue to be rapid, the kind of research that will make clear the trends and impacts of significance will continue to struggle to cope with the pace being set. Perceptions of time will be considered further in this chapter as part of the analysis of needs and behaviours.

This initial review of research on the societal and global effects of the Internet that herald in the network society has highlighted a number of issues:

- The network society is not something in the distant future, but now an emergent reality in many societies across the globe.
- Unlike innovations in most other areas, the Internet is having radical effect on the behaviours and expectations of societies; as technologies change so people are changing.
- There is a socio-technical determinism driving Internet innovation and diffusion with levels of social impact that seem set to continue in the future.
- Perceptions of time have changed in relation to social behaviours and the speed with which change takes place.

These issues will be considered in relation to the examples of developments and effects that are presented in the rest of this chapter. They will also be returned to in Part Three where synthesis of all of the various analysis activities of Part Two will be undertaken.

4.3.2 NEW BUSINESS MODELS, NEW MARKETS

The private sector already has many examples of successes and failures enabled or caused by the Internet. In a market economy the seller must exchange enough goods or services at the right price to achieve a positive return from sales, either by competing successfully against other organisations in the supply of similar goods and services or by creating a novel service proposition that attracts new customers. In the often-misquoted words of Emerson:

> "If a man has good corn or wood, or boards, or pigs, to sell, or can make better chairs or knives, crucibles or church organs, than anybody else, you will find a broad hard-beaten road to his house, though it be in the woods." (Hope, 1996, p93)

Since Emerson made this statement in a lecture in the late 1880s the landscape of economics has been populated by many different theories, from classical economics and Marxism, through Keynesian and neoclassical to post-Keynesian, monetarism, globalism, behavioural, emotional and most recently the economics of the network effect[19], to mention just a few. However, Emerson's words provide a simple and elegant statement of the very basic principles of supply and demand that, despite the universe of economic theories, will always underpin the relationship between the supplier and the user/customer/consumer. Equally, it is a statement that may be applied to the provision of public goods. Just as the successful exchange of private goods for financial gain requires a customer with a need and a supplier that the customer recognises as able to meet that need, so the same underlying principles apply to the exchanges that take place in the public sector. It is for this reason that examining the changes taking place in competitive markets is essential for a closer understanding of the trends important for the future digital success of collecting institutions.

Comprehensive evidence on the use and impact of digital technologies and networking in the commercial sector is less easy to obtain than data on end user behaviours. There are many

[19] Network effect: the economics of the crowd, reported in Wired Magazine, December 2012, p146

different sectors containing companies of very different sizes so that the evidence available is less timely than user studies and is stronger in some areas than others. The main analysis instruments for the UK are managed by the Office for National Statistics (ONS) and less rich analysis is available on the European Commission's Eurostat website (Giannakouris and Smihily, 2011; Eurostat, 2012). In the UK, **The Store of the Future 2012 - 2015** (Centre for Retail Research, 2008) provides a summary of confidential research on likely trends in the form and presentation of shops, that is relevant, although now somewhat dated.

In Europe generally the most obvious trend is the sustained increase in the adoption of the Internet within the existing business model:

> "The use of Information and Communication Technologies (ICT), and in particular the evolution in accessing and using the Internet, drive the way that enterprises run their business, conduct e-Commerce and interact with the national public authorities. In 2011, more than nine out of ten enterprises in the EU27 had access to and used the Internet; more than eight out of ten through a fixed broadband connection, and almost half via a mobile broadband connection over telephone networks." (Giannakouris and Smihily, 2011, p1)

The **Eurostat Information Society Statistics** (Eurostat, 2012) report indicates that in 2011 95% of UK businesses had Internet access, 93% using broadband, and 79% having a public website, compared with a Europe-wide figure of 69%. With the increasing take up of the Internet across society it is unsurprising that a large majority of suppliers of goods and services now see as de rigueur visibility on the Web, along with social network channels to win and hold the attention of audiences. It enables the identity of the organisation to be visible within search engines and recommender services, offers a cost effective means of distributing information about products and services and can provide a 24/7 online channel for transactional services. **ICT Activity of UK businesses, 2011** (Office of National Statistics, 2012) highlights that, at 18%, sales through e-commerce remain modest for enterprises in the UK, but maintain steady growth year on year. This level of e-commerce is close to the European average of 15% (Eurostat, 2012). Such a situation may not change radically the core mission, rather providing emerging opportunities to reach new audiences, particularly for larger organisations. Marks and Spencer and John Lewis are two UK examples of companies with outlets in many locations that have developed sophisticated online shopping experiences. This multi-channel retailing is an evolutionary development of a traditional trading model in response to changing consumer demands that has led to the blending of the traditional store with the online shopping experience in 'click and collect' services. Order online and pick up at your local store. Those same large trading organisations are also exploiting heavily big data:

> "The rise of technological innovation has been matched by the rise in data. Data is the new raw material of the 21st century and commercial administration datasets compiled using customer loyalty cards or collected through online transactions provide retailers with a wealth of data on consumers." (Ince and Jackson, 2012, p.12)

Available evidence from the private sector suggests an 'adopt and adapt' approach that, by and large sustains business models modifying existing systems and practices. Networking can

reduce overheads; for example emailing promotional information rather than posting mailshots involves lower transaction costs and the possibility to match the advertising message to appeal to particular audience groups. It can have similar effects on supply chains where stock management systems and electronic links with suppliers can facilitate economic exploitation of resources.

The fact that overall the number of organisations trading online remains relatively low must be set against the fact that, according to the 2013 **Oxford Internet Survey** 87% of Internet users bought goods and services online (Dutton and Blank, 2013, p29). The **ONS Internet Access – Household and Individuals, 2013** report puts that figure at 72% (Office of National Statistics, 2013a, p6), but both figures indicate that online shopping is one of the most popular Internet activities undertaken. The reason for this is that most of the online transactions take place with a small number of companies representing the vanguard for the radical re-definition of supply chains and business models. The globalisation that the Internet has facilitated enables trading enterprises such as Amazon, iTunes, Netflix, and eBay through networking and scale to reduce transaction costs and therefore the cost to the customer, to the extent that whole market sectors have been undermined. The exploitation of retail markets through innovation and new business models of these global trading companies and their impact on many aspects of traditional markets may be demonstrated by a brief consideration of three: Amazon (including Abe Books), eBay and Apple's iTunes.

Amazon has led the way in demonstrating the impact of online sales, electronic supply chains and the exploitation of information about customers. Virtual sales and centralised stock management have reduced in-house transaction costs while Amazon's global market has enabled it to reduce margins through the scale of turnover. It took almost eight years from launch for Amazon to turn a profit[20], but since critical mass of demand was achieved, Amazon has begun to challenge swathes of the retail sector on price, service quality and convenience. Rightly or wrongly, Amazon has been blamed for the steady demise of the High Street bookshop (Mount, 2011) and created increased pricing competition in areas such as electronic goods (Naughton, 2012). It has kick-started the mass market for ebooks with its walled garden Kindle proposition that, in turn, has had a disruptive effect on both publishers and libraries. With the acquisition of Abe Books Amazon has created an integrated entry point to books new and secondhand. The impact of Amazon has evinced a range of responses. There are those that bemoan the loss of the local bookshop in the face of Amazon's cost cutting and efficient delivery, but clearly Amazon's levels of profits shows high user satisfaction. The same can be said for the Kindle offer since in September 2013 it represented 79% of the UK ereader market (Mackintosh, 2013) and Amazon is steadily increasing its market share of ebook sales (Windwalker, 2012). In these two cases other parts of the supply side have been challenged. Retail outlets such as bookshops have certainly found it hard to compete, while many sellers of electronic and other durables have found their outlets used as reference collections to browse goods before the

[20] http://en.wikipedia.org/wiki/Amazon.com#cite_note-24 [accessed 14th October 2013]

purchaser orders online (Centre for Retail Research, 2008). Amazon has had to build a physical infrastructure to deliver the goods, but is able to exploit fully the Web as the primary tool of product display, personalisation, transaction management and of marketing: no showrooms, no sales staff taking orders by phone and the opportunity to build monumental marketing databases through the aggregation and manipulation of customer purchases and personal profiles: "…a science of user engagement" (Naughton, 2012). Amazon represents a refinement, however radical, of a traditional retailing model. Its scale and success reflected in its return on investment demonstrates the effectiveness of the innovative trading model, while lower prices and customer satisfaction should sustain high levels of demand. Across the supplier/purchaser exchange relationship, therefore, the model looks win/win.

Abe Books, now a part of Amazon, is an example of technology enabling a genuinely innovative route to market creating a global network of secondhand bookshops. Secondhand bookshops have probably existed as long as books and until recent years each carved out its own destiny as a physical destination, a place where people went to browse. The search for some particular title might mean long and, maybe, fruitless hours across many locations. Abe Books has now transformed this business model, offering a one-stop online bookshop of some 100m books from bookshops across the world, seamlessly disclosing a long tail of specialist items of interest to very small niche markets (Anderson, 2006). Secondhand booksellers now have an incentive to catalogue fully their stock since once online the user can search every bookshop collection at the same time, the deal closed with just a few clicks. The secondhand bookshop as destination may endure, but suddenly alongside the shop is a virtual warehouse simultaneously available to a global market. As a result, a cadre of traders has rejected the shop on the High Street to deal with the global market solely online.

This blossoming of online-only selling has attracted traders dealing in niche markets, relying solely on a Web presence both to advertise and to sell, without any physical retail infrastructure other than delivery services. Amazon now offers the facilities for such virtual traders to operate through the Amazon Marketplace[21]. 'Remote' trading is not a new model, having roots back in the 19th century when the Sears Roebuck catalogues enabled the sale of goods across the US (Emmet and Jeuck, 1950), but the advent of the Internet with lower barriers to entry has opened up this form of commerce to a much larger number of individuals and organisations. Companies that acted as wholesale suppliers of goods to the retail trade can now sell direct, while individuals can sell their own wares from their website or trade on eBay, the second example cited above. While Amazon's global retail domination is a phenomenon, eBay has had a more transformational impact on user behaviour (Peters and Bodkin, 2007). People have always bought and sold outside of the formal retail sector, for example, from car boot sales and small ads in newspapers. eBay has brought millions of new users into a global market for buying and selling. eBay's business model is an example of several new business models in the private sector. Unlike Amazon, which requires a large infrastructure to get goods delivered to the

[21] Amazon Marketplace http://www.amazon.co.uk/gp/help/customer/display.html?nodeId=3149101 [accessed 8th October 2013]

customer, eBay is not itself a trader. It is a transactional service facilitating trading. It provides the online shop window and the mechanisms for transactions. eBay's income comes from a range of fees, marginal to the seller that, when scaled to the level of business, represent a significant level of net income: $3.2bn in 2011 (Wall Street Journal, 2012).

Apple's iTunes is the final example of global services that has had significant impact on the market through the innovative use of the Internet. iTunes shows how innovation can bring about structural change not only in the organisation, but across a whole industry. This dynamic effect will be considered in more detail when reviewing the engagement of the public sector. It is certainly the case that the shift to personal devices such as the iPod and the supply of recorded music online, exemplified by iTunes, has created a revolution in the structure of the business models of the recorded music industry - new forms of commodity, new supply chains, new methods of payment - and, at the same time, has brought about the near extinction of recorded music retailers in the High Street. John Naughton in his recent study on the Internet provides an enlightening description of the drivers for change in the industry that had its roots in the birth of the CD:

> "For the record companies, the CD was a wonderful example of industry friendly innovation because it offered a way of selling the same kind of stuff at a higher price (and with correspondingly higher margins) while not requiring any radical changes in their time-honoured customs and practices. In the old days, they made and sold vinyl discs; now they sold digital discs. Everything else - including the ways executives were incentivised - remained more or less the same. No disruption. No pain. Just more profit." (Naughton, 2012, p64)

This reflects behaviours apparent elsewhere in both the public and private sectors as noted above, a strategy of adoption and adaption of new technology to support a traditional service proposition. The International Futures Forum describes this as "sustaining innovation" - business as usual, but with the risk that over time strategic fit is lost[22]. With the advent of file sharing (thanks to broadband) and the creation of the MP3 file format enabling rapid transmission of audio files, the scene was set for the arrival of a generation expecting to pick and choose tracks and the launch of the iPod. Naughton again:

> "And yet the record industry effectively ignored it. Not only that: it persisted with a distribution system whose economics meant denying customers what they wanted. CD technology meant that single tracks were economically unviable and so the industry tried to force the customers to buy albums. Yet the demand for 'singles' - tracks - never went away, as the world discovered when Napster provided an easy way to get them. What other industry would ignore a technology that promised to halve its operating costs? What other industry would turn its back on what many of its best customers wanted most?" (Naughton, 2012, p76)

In the short to medium term other industries (publishing, news media for example) and, perhaps, the public sector may be able to add their names to the answer to Naughton's final question.

[22] International Futures Forum website. Available at: http://www.internationalfuturesforum.com/ [accessed 8th October 2013]

In other sectors organisations have taken on the dynamics of innovation actively to change their business proposition to their advantage more than to that of the customer. Banking is an exemplar. Online banking, including ATM machines, offers convenience to the customer, but alongside this innovative approach, there has been a move to reduce branch numbers and over-the-counter services. Using networks services have become more centrally controlled and the range of tasks that can be done by staff is frequently constrained by standardised systems operating within the online environment. Banking appears to be encouraging a shift towards *bank online* from *bank as destination,* as a means of reducing overheads rather than principally in response to consumer wishes. Elsewhere, trading organisations with less collective control over their audiences must continue to compete successfully if they are to survive. Examples have been given of evolutionary enhancement of services where existing retail traders develop online shops in parallel with physical outlets. **The Store of the Future 2012-2015** report describes evolutionary change, now becoming a reality, as online shopping gains a bigger market share:

> "The most likely format changes were 'more information services in-store'. There was also support for the idea that local stores would provide local pick-up for customers who had ordered on the web as well as the concept of smaller stores focusing more on customer information and being supported by Internet services." (Centre for Retail Research, 2008, p1)

Turning to start-up business models that break from the conventional model, Google is perhaps the most dramatic example of financial success gained from micro-payments, in Google's case for advertising (Google Adwords), taking a small fee if a searcher clicks on an ad, and transaction services[23] similar to eBay. It is estimated that in 2013 Google received almost six billion searches a day[24], turning small payments into a lot of money; money enabling Google to develop or acquire more services - YouTube, Blogger, Gmail, for example - to attract more use and also to provide more outlets for advertising. Google's business model means that services are free at point of use. Similar e-commerce business models are used by other free global services such as Facebook, Pinterest and Twitter. Services such as Skype, Dropbox (cloud storage), Mendeley (a reference manager and PDF organiser[25]), and LinkedIn have developed hybrid service offers where the basic service is free while a more advanced service is offered for a monthly fee. Generally the charged service has been added as the success of the basic free service has been assessed: an evolutionary process, offering a free entry level to all and a richer range of functionality or greater capacity to serious users. This has acquired the label 'freemium' [free+premium=freemium] (Nelson, 2013).

A number of these start-up services have rapidly become global phenomena, building huge audiences of users, searching, communicating and sharing and are, or aspire to, make

[23] Google Checkout website. Available at: https://wallet.google.com/enroll/?flow=wallet&continue=https://wallet.google.com/manage/# [accessed 8th October 2013]
[24] Static Brain website. Available at: http://www.statisticbrain.com/google-searches/ [accessed 7th October 2014]
[25] Mendeley website. Available at: http://www.mendeley.com/ [accessed 14th October 2013]

significant profits. Yet, to the user the basic service is free and open to anyone and can be used without restrictions 24/7. In economic terms this makes them unlike conventional private goods since they are neither rivalrous (the consumption of a good reduces its availability to others) nor excludable (payment in exchange for a good or service as a means of controlling demand). Indeed, one definition of a public good is that it has non-exclusivity; for example investment in clean air cannot be limited to selected beneficiaries (Drahos and Braithwaite, 2002, p215; Lane, 2000, p30). Thus, the user of services such as Google may appear no different from public good services supported by taxation. Google Search provides an access route to knowledge and information that traditionally would have been provided through the resources of a library or other public information service.

As consumers, we expect Google and knowledge resources such as Wikipedia to give answers to questions within seconds, and both global services have transformed radically our ability to find new knowledge wherever and whenever we want it. Wikipedia is obviously a very different animal from Google since its raison d'etre - to be *the* Free Encyclopedia - would be unachievable without the willing, voluntary work of tens of thousands of Wikipedians. Operating cash flow comes from fundraising, but meeting the direct labour costs of such a giant undertaking would be astronomical (Lih, 2009). According to the Wikipedia Statistics article[26], it has in excess of 4.3 million articles and is visited by over 500m users a month. Here we have a business model different from those described so far. Wikipedia is an independent foundation outside of the public domain with a mission to deliver free knowledge for the betterment of everyone. It is neither wholly private nor wholly public. It relies on the gifting of time from private individuals across the globe enabling free use of the resource while being independent from public policy and not in receipt of public funding; the Network Effect in action. Yet Wikipedia works in partnership with many public institutions across the world to support their public service missions[27].

Key issues arising from this section on business models and routes to market are:

- There are aspects of the business models and supply chains in the private sector that are of relevance to the future strategic development of collecting institutions.
- The impact of Network Society developments is already having significant impact on organisations in the private sector; for example, promotion, streamlining supply chains and developing multichannel service offers to customers.
- Generally, within the established private sector, development has been evolutionary on the basis of 'adopt and adapt' within the existing business model.
- Innovation has led to the emergence of globally successful start-up companies exploiting the power of networks to replace traditional business models with completely new service propositions. These new approaches, in some cases, redefine the retail

[26] Wikipedia statistics Available at: http://en.wikipedia.org/wiki/Wikipedia:Statistics [accessed 14th October 2013]
[27] For example the Wikipedian in residence at the British Museum. Available at: http://www.wittylama.com/2010/03/the-british-museum-and-me/ [accessed 14th October 2013]

supply chain, to replace the physical shop with an online store serviced from large warehouses.

- Other innovative business models include the creation of a global one-stop shop for second hand books (Abe Books), a market place for individual sellers (eBay), increasing customer convenience.
- ITunes provides perhaps the clearest example yet of innovation that has profoundly affected a pre-existing sector - recorded music - reducing the profitability of recording companies and the viability of high street retailers.
- Private sector organisations have used the application of digital techniques and networking to manage their customers' needs (call centres) and to mine information about their needs (loyalty cards and big data analysis tools, for example).
- Networking has led to the globalisation of the most successful of these services.

4.3.3 OPPORTUNITIES AND RISKS OF INNOVATION

> "Not surprisingly, the Internet looms as an infrastructural technology that is enabling the disruption of many industries." (Christensen, 1997, xxvi)

Christensen's book **The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail** was based on research into the behaviours of large established industry names – the *great firms* of the title – and was written, in Internet time, long before the explosion of network based services and consequent unstoppable surge in consumer demand of the 2000s. Yet his message is prescient across the private and public sectors alike in warning that no organisation should sit back and assume that either long-established, respected market leaders or well-funded research and development departments would be able to withstand the advance of the Internet.

Regardless of modes of delivery, the business model depends on an exchange relationship of goods and services with a customer, influenced by price, quality, convenience and consumer need. Global services such as Google, Wikipedia, Facebook, Flickr, YouTube and Twitter retain this exchange relationship, but radically redefine one or more of the influencing factors – free at point of use, user-friendliness, meeting new, unmet global need, for example. Moreover, their route to market did not involve significant outlay on infrastructure or development; financial risk was minimal. Lessig, writing in the online edition of **New Republic,** compares the hurdles facing two young entrepreneurs (Tom First and Tom Scott) developing a new line in fruit drinks in the early '90s and Mark Zuckerberg's task developing Facebook:

> "People liked their juice. Slowly it dawned on First and Scott that there was a business here. Nantucket Nectars was born. The two Toms started the long slog of getting distribution… At each step after the first, along the way to giving their customers what they wanted, the two Toms had to ask permission of someone. They needed permission from a manufacturer to get into his plant. Permission from a distributor to get into her network. And permission from stores to get before the customer. Each step between the idea and the customer was a slog. They made the slog and they succeeded…
>
> Zuckerberg faced no such barrier. For less than USD1000 he could get his idea onto the

> Internet. He needed no permission from the network provider. He needed no clearance from Harvard to offer it to Harvard students. Neither with Yale, Princeton, or Stanford. Nor with every other community he invited. Because the platform of the Internet is open and free…a billion Mark Zuckerbergs have the opportunity to invent for the platform." (Lessig, 2010, p4)

Internet start-ups could get quickly to market and use the viral effects of the Internet to spread the word. Lessig is right that this situation opens up the market to us all; we can all be Zuckerbergs. Naturally, we must have a good idea and the passion and the technical skills to make it work. In the words of Williams, co-founder of Twitter:

> "Here's the formula if you want to build a billion-dollar Internet company. Take a human desire, preferably one that has been around for a really long time…Identify that desire and use modern technology to take out steps[28]. (Tate, 2013)

This new form of innovation contains within it a paradox. On the one hand, the Internet market is dynamic, even perhaps chaotic, with new products appearing all of the time and user allegiances subject to sudden change. As a result Internet innovation faces a high risk of failure. On the other hand, while the risk of failure may be high, the cost of failure may be relatively low; what Naughton (2012, p10) describes as "frictionless innovation".

To launch a successful challenge to these established giants is further complicated by the nature of what many of them do, which is to connect people together; using electronic networks to create social networks. So, for example, Twitter, Facebook or Skype all operate on the basis that there is network convergence on their service to enable people to communicate within 'walled gardens'; a phenomenon also apparent in the use of Apps on mobile devices (Schonfeld, 2008). This returns to the paradox highlighted when considering the way that the Internet is able to support frictionless innovation. The route to market is not difficult, but joining the small club of global services that can create enough demand to generate a return on investment is very tough indeed. Nevertheless at more local levels (geography, community of interest), there are examples of sustainable services that have built a community of users around special interest niches. Internet radio is illustration of a service that can operate at very low cost and therefore satisfy a small but enthusiastic audience (frequently online audiences for Internet radio stations can be less than 100 globally)[29]. Specialist tools for particular audiences have also been successful. For example, Mendeley, Scrivener (a content generation tool for writers[30]) and Zotero (an academic research tool[31]), appeal to the specialist community of academic users who want to manage resources efficiently and effectively. The impact of the kinds of global successes described above has been more significant more quickly than any other products developed in the past. The scale of Facebook membership stands at around 14% of the

[28] **"**Take out steps" means simplify by removing unnecessary tasks.
[29] See for example http://laradiofm.com/ [accessed 14th October 2013}
[30] Scrivener website. Available at: http://www.literatureandlatte.com/scrivener.php [accessed 14th October 2013]
[31] Zotero website. Available at: http://www.zotero.org/ [accessed 14th October 2013]

population of the planet[32]; the purchasing power of Amazon, giving it the ability to drive down prices to the consumer due to the scale of its trading reach; or the routine importance of Google to our daily lives, have changed individual and collective behaviours and expectations. *To google* has now gained official lexicographical recognition having been in the Oxford English Dictionary since 2006.

It has been noted that there are a number of different strategies available to organisations to maintain their competitive edge, and thus ensure their survival. Some organisations have decided that their business proposition (service or product line) is sufficiently strong and successful in the short to medium term to limit the application of the Internet to back office and support activities such as marketing and technical information. These actions are likely to reduce operating overheads while providing added value to the consumer; 24/7 access to information, competitive pricing, for example. Other organisations have grasped new ways of delivering their services alongside the traditional routes to market, sustaining existing routes while developing new ones. Finally there are the digital start-ups, already described, that represent a highly successful few amongst a crowded landscape of ideas that have failed. Christensen, in his extensive study of innovation, highlights the 'edge' that may be available to this last category of small-scale entrepreneurs or the lone inventor with a new idea:

> "Perhaps the most powerful protection that small entrant firms enjoy as they build the emerging markets for disruptive technologies is that they are doing something that it simply does not make sense for the established leaders to do. Despite their endowments in technology, brand names, manufacturing prowess, management experience, distribution muscle, and just plain cash, successful companies populated by good managers have a genuinely hard time doing what does not fit their model for how to make money." (Christensen, 1997, p22)

Innovation is not a new phenomenon, not even measured by the last few hundred years of the Enlightenment. In the very first paragraph of **The Ascent of Man** Bronowski describes homo sapiens as not a figure in the landscape, but shaper *of* the landscape. Later he writes:

> "The most sophisticated creature (biologically and culturally) of the last half million years or so could do better than copy the ancient stone choppers that went back to Australopithecus. He made tools which require much finer manipulation in the making and, of course, of use." (Bronowski, 1973, p41)

Homo Faber (man the creator) has been around for a long, long time and, at the level of the human urge to shape things to useful ends, the drivers of innovation described in this section can be linked back to the processes of creation, refinement and invention that produced the earliest civilisations. Yet, when dealing with contemporary rates of change and its diffusion across the planet in 'Internet time' the challenge is to derive any useful conclusions from the observed phenomena. Organisations must judge for themselves within the context of their audiences and competition the risks and opportunities that Internet innovation presents to them (Christensen, 1997, p226). Are the *back office* innovators risking failure in the medium term as

[32] Yahoo website. Available at: http://news.yahoo.com/number-active-users-facebook-over-230449748.html [accessed 4th October 2013]

the more aggressive innovators come up with more attractive products and services? Are the *foot in each camp* innovators hedging their bets with an evolutionary move from traditional to digital and therefore missing more radical strategies? Are the *digital natives* likely to be blown out of the water in short order when a better offer surfaces? And, of course, what might be the time horizons for sectoral change? The recorded music industry has undergone major structural change in but a few years, while the book publishing industry is recognising the serious challenge of the ebook without any clear consensus of how to deal with the threat that this medium poses. None of these questions has an immediate and simple answer since, in the relatively short period that the Internet has been a powerful catalyst for organisational change, there has been insufficient time for any kind of stable pattern to emerge. Change and innovation are rapid and a constant.

Key issues arising from this section:

- Disruption - the nature of the Internet threatens disruption to established organisations and sectors.
- Frictionless innovation - organisations creating Internet-based consumer offers are able to achieve success without many of the traditional barriers to innovation, such as negotiating deals with independent organisations within traditional supply chains.
- Global v local – while there are very few global successes, there are successful niche markets for the provision of innovation.
- Innovation has produced new forms of business model and new mechanisms to generate return on investment, many of which are able to do so while maintaining services free at point of use.
- Risks – the risk of failure for the delivery of new Internet services is high, but the frictionless nature of online innovation means that the costs of failure may be low. There is a further risk to successful services that, unless they are able to create a large community of users bound together by the service offer, there will be the concern that some new market entrant will quickly become the dominant player. The viral effect can create very rapid market change.
- Sustaining v disruptive innovation – across the last two sections examples have been presented of both aspects of Internet innovation. Retail organisations have extended their services to provide highly successful online offers while maintain the existing infrastructure, such as supply chains and retail outlets, while other organisations have created completely new models of service that have had dramatic impact on the pre-existing sector.

4.3.4 MEDIA AND CHANNELS: TRANSFORMATIONS AND CONVERGENCE

If Castells is correct, that in the Network Society the space of flows takes over from the space of places, then understanding what are the new dynamics in the digital space is fundamental to survival. Yet, underlying this social and technical shift, it must be remembered that channels of communication have always been essential components of human society. With regard to the

communication of knowledge and information, collecting institutions, along with media-related institutions, have been central nodes of transmission. At this level the increasing accessibility of digital networks has not changed the underlying principles of communication within the social fabric or the symbols and processes that are used (text, sound, images). Gerbner defines communication as, "social interaction through messages" (Gerbner, 1967, p40) while Theodorson and Theodorson offer a more elaborated definition:

> "The transmission of information, ideas, attitudes or emotions from one person or group to another (or others) primarily through symbols." (cited in McQuail and Windahl, 1993, p4)

These definitions apply to the space of flows as much as they did (and do) to the space of places. In pre-Internet days, communication was one-way, locked into structured production processes that might depend on complex organisations – publishing, news media, television, for example – and delivered across discrete channels – broadcast across the airwaves, printed books, newspapers, recorded music, postal services, telephone systems (the single example of real-time interaction). The Internet dissolves all these separate channels to allow two-way communication within a single conduit and in doing so unlocks engagement and broadcasting to all. The ability of an individual to be able to create, to publish and to interact is a fundamental change. The combination of mass-market digital image capture (still and moving) with large-scale data storage *in the cloud* and friction-free methods of transmission have created new opportunities to share and to inform. Flickr has become a global platform for managing personal image collections and for broadcasting them to a global audience while YouTube, with one billion user visits a month[33], has become a global platform for video that can both entertain and inform. YouTube is much more than a warehouse for the storage of family movies. It has empowered a new generation of entrepreneurs producing news, entertainment and instructional videos outside of traditional media processes (Cheshire, 2013, p90). Beyond this opening up of direct citizen engagement, both Flickr and YouTube have been adopted by public sector organisations in support of their missions. Globally, collecting institutions large and small are using Flickr as the means to disclose images and encourage audiences to comment on them[34]. Within education YouTube particularly is supporting new forms of pedagogy (Duffy, 2007). For example, the UK's Open University has an extensive range of educational videos on its YouTube channels that in the four years after its launch attracted more than 10 million visits (Open University, 2012).

The interactivity engendered by the Internet has made possible completely new forms of citizen interaction and, echoing Castells' words at the beginning of this chapter, has begun to challenge traditional flows of power. The blogosphere provides both tangible and metaphorical platforms for anybody's voice to be heard, but not necessarily to be listened to, while Twitter and Facebook have demonstrated the rapid, viral effect of trending public opinion, sometimes with

[33] YouTube website statistics page. Available at: http://www.youtube.com/yt/press/statistics.html [accessed 24th October 2013]
[34] Flickr Commons website. Available at: http://www.flickr.com/commons [accessed 23rd October 2013]

good effect, sometimes less so. Beyond these *instant* public effects, the Internet has stimulated wider involvement in creative endeavour. Musical performances may be published on YouTube and sold on iTunes without the traditional structures of production and distribution. New market opportunities for writers now exist, self-publishing ebooks with low production overheads and sold through online retailers such as Amazon[35]. While a small part of the overall publishing market, self-published ebooks can be profitable for the author. There are a growing number of tools for social curation. Flipboard[36], allows the user to curate and share their own magazine aggregating from feeds and recommendations. Paper.li[37] supports the same process of curation, building a digital newspaper from tweets chosen by the user.

To return to the beginning of this section, all of the outcomes of the activities and trends described might be viewed as evolutionary rather than radically innovative since the underlying principles of communication remain. Symbols are still transmitted to be received by a recipient. However, the two-way nature of the Internet and the fact that it is a single, multi-purpose channel has produced three significant outcomes. First, new opportunities are open to us all to communicate, to work, play games, gamble, even to watch television and movies on the move from a variety of interchangeable devices. Second, through the popularisation of engagement, traditional business sectors, such as publishing, broadcasting, recorded music and news media, are being challenged as their established production processes and dominant channels of supply begin to be contested. Third, through the real-time immediacy of social media, the collective voice of the citizenry has become more audible.

At a more granular level, there is a fourth outcome, of particular significance to this research, that must also be considered. That is the implications for collecting institutions of 'born digital' knowledge objects (books, video, audio, artifacts, archival records) or physical objects for which a digital simulacrum has been created. In **Digital Information Culture: The Individual and Society in the Digital Age** Tredinnick identifies a number of ways in which digital media differ in form from traditional physical knowledge objects. In his view the explosion of information created by blogs, emails, images, movies, websites and so on "…gently but relentlessly drizzles down on us in an invisible, impalpable electric rain" (Tredinnick, 2008, p21). Where once creativity was fixed in the printed book, the physical artifact or archival record, digital objects can be changed and recycled to create a bricolage made of fragments of different objects:

> "The objects of culture are no longer secured behind glass cases, or tied to the walls of museums and galleries or constrained by the control over publishing and broadcasting, but are created and recreated in the social process." (Tredinnick, 2008, p90)

Alongside this *fragmentation* two other phenomena may be observed. First, there is *disintermediation*, where increasingly the power over creation, use and dissemination of information and knowledge shifts from central agencies (publishers, mass media, public service)

[35] Kindle Direct Publishing website**.** Available at**:** https://kdp.amazon.com/self-publishing/signin [accessed 22nd October 2013]
[36] Flipboard website. Available at: https://flipboard.com [accessed 5th November 2013]
[37] Paper.li website Available at: http://paper.li [accessed 5th November 2013]

much closer to the consumer. Many-to-many communication contrasts with the traditional one-to-many model, creating a participatory culture that places the consumer/creator in competition with those agencies traditionally managing channels of access to knowledge and information. Second, since the digital object does not have the fixity of the material object, there arises the question of *authenticity*:

> "The material presence of physical objects provides clues to their meaning and value. The scale of works of art directs our interpretation of them, creating impressions of intimacy or grandeur, distance or involvement. The reach of a sculpture or building that seems to deny its own weight is part of the meaningful impression that it creates…The quality of paper, printing and binding directs our apprehension of written works. The weight of a book in the hand is part of the impression it gives; we talk of weighty books and light reading because of the link between tactile and cognitive experiences of reading…In these examples, the material and the aesthetic combine to give a total impression of the cultural object. But digital artifacts are unconstrained by their cultural form. At the level of their cultural meaning, they do not possess substance, weight, volume or texture; there is no such thing as a weighty ebook. In addition, technologies for the display of digital objects tend to lead to homogenisation and flattening. The material clues to the scale of the cultural work are stripped from the digital reproduction. Paintings of different proportions occupy the same digital space. Digital technologies therefore undermine the connection between materiality and form, and tend to homogenise cultural objects." (Treddinick, 2008, p85)

Fragmentation, disintermediation and authenticity will have significant impact on how collecting institutions curate and exploit digital collections. It may be possible to mitigate the effects of fragmentation and disintermediation through technical solutions, but authenticity reaches right to the heart of the trust that citizens have previously placed in collecting institutions. When digitised, all objects have the same *homogenised* form offering new routes to knowledge aggregation and service development, combining previously different types of object. Guaranteeing authenticity may present very serious challenges.

Key points from this section

- The fundamental principles of communication - purpose and symbols - are unchanged by the use of the Internet.
- The Internet has made possible both the integration of many different channels of communication into one single channel and enabled frictionless two-way communication across that channel.
- This two-way connectivity has provided opportunities to empower everyone to express themselves, individually or collectively, and thus begin to make more explicit public opinion as well as differing views.
- The increasing body of born digital or digitised resources likely to be held by museums, libraries and archives has very significant implications for their traditional functions of collecting, curating and disclosing.

4.4 DEMAND – USER NEEDS AND BEHAVIOURS

In earlier sections of this chapter reference has been made to the changing relationships between the individual, society and the Internet. The intention of this section is not to recapitulate all of those matters, but to examine the evidence available to provide scale and trends on how users are behaving; what are their expectations and their emergent needs. For an understanding of the social dimension of the Network Society in the UK, there are three sources of current statistical evidence:

- The Oxford Internet Institute's bi-annually **Oxford Internet Survey**;
- Statistical bulletins produced by the Office for National Statistics;
- Ofcom's Annual Communications Market reports.

The three sources together are a rich mine of relatively contemporary trends covering the whole of the UK population. These are supported by academic studies and other reports on user behaviours and on particular types of use, for example, social networking, crowdsourcing, online shopping. The purpose of this section is to consider the broad societal trends that are observable, rather than provide a comprehensive literature review of all aspects of user research. There are three factors relevant to the review; the reach of the Internet in society, the uses to which the technology is being put, and the changes in behaviours and expectations that may be observed.

4.4.1 THE REACH OF THE INTERNET

The speed of diffusion of the Internet into society has already been described. All the recent surveys demonstrate that only a small minority of the population remains disengaged. The 2013 edition of the **Oxford Internet Survey** [**OxIS13**] (Dutton and Blank, 2013, p12) puts the figure of Internet users over 14 years of age at 78%, while the **ONS Internet Quarterly Update** for quarter 2 of 2013 (Office for National Statistics, 2013b, p1) puts the figure of adult users at 86%. The 2011 edition of the **Oxford Internet Survey** [**OxIS11**] (Dutton and Blank, 2011, p4) reported that "dramatic shifts" had taken place in the take-up of technology. It described the emergence of "next generation users" (NGUs). These are not just rebranded *digital natives* – the first "born digital" generation (Palfrey and Gasser, 2008) now in their teens and early twenties. Rather NGUs are users of all ages who access the Internet:

> "…from multiple locations and devices. Specifically, we operationally define the next generation user as someone who uses at least two Internet applications (out of four applications queried) on their mobile or who fits two or more of the following criteria: they own a tablet, own a reader, own three or more computers. By this definition, in 2011, 44.4% of Internet users in Britain were next generation users." (Dutton and Blank, 2011, p4)

OxIS13 reports that NGUs now represent 67% of all Internet users (Dutton and Blank, 2013, p10). An increase of 23% in just two years highlights perhaps the most significant trend of recent years: the increasing adoption of mobile devices (laptops, smartphones and tablets) as platforms of choice. There are three reasons for this trend:

- Smartphones and tablets now contain sufficient power and storage to undertake all of

the tasks that in the past depended on a desktop device or a hefty laptop. Ofcom's **Communications Market Survey 2014** (Ofcom, 2014) indicates that 64% of adults have smartphones and 44% of households have tablet computers; a 100% increase since 2013 (Ofcom, 2014, p4). 60% of users access the Internet on mobile devices.

- The integration of the use of any one of an NGU's devices with all the other devices to allow seamless use has become a reality with the availability of low cost or free 'cloud' storage, so that data is synchronised across all devices.
- The synchronicity is made possible by the increased accessibility and amount of bandwidth available to users on the move. Wifi is progressively becoming a given in public spaces and the launch of higher bandwidth 4G mobile services late in 2012 has already attracted over a million users (Ofcom, 2013, p4).

The use of wifi is not only of significance while on the move. **OxIS13** shows that of the households with Internet access 96% of them use wifi technology in the home (Dutton and Blank, 2013, p17). This is not only important for understanding the advance of a particular technology. Within the household wifi enables mobility of access, just as it does when 'on the move' and supports multiple users on a variety of access platforms. **OxIS13** demonstrates the take up of different Internet-enabled devices in the home making wifi the access technology of choice. Table 4.2 below shows the percentage of penetration of digital devices in the home beyond the desktop computer and the laptop:

Device	
Mobile phone	91%
Digital camera	70%
Satellite TV	55%
MP3 player	51%
Games console	50%
Web-cam	48%
Tablet	37%
Reader	27%
TV with Internet	22%

***Table 4.2** Digital devices in households with Internet access 2013 (Dutton and Blank, 2013, p16)*

Ofcom14 indicates that 25% of fixed broadband connections – some 6 million – are now superfast, offering over 24mb per second; an increase of 50% from 2013. (Ofcom, 2014, p4)

Concern is rightly expressed about the divide between those who have access to the Internet and those who do not. Organisations such as GoOn UK[38] and the Tinder Foundation[39] work to connect the last 15%-20% of the population since lack of access can be socially disadvantageous. In the short-term this will remain a challenge as, for many on the wrong side of the digital divide, the barriers may be cultural or motivational rather than lack of connectivity.

[38] GoOn UK website. Available at: http://www.go-on.co.uk [accessed 19th October 2013]
[39] Tinder Foundation website. Available at: http://www.tinderfoundation.org [accessed 29th October 2013]

OxIS13 data shows that of non-users 81% said they had no interest in the Internet (Dutton and Blank, 2013, p5). However, seen within a long-term perspective the data sources demonstrate the likelihood that the divide will continue to reduce through generational change. While **OxIS13** shows that less than half of retirees (45%) use the Internet (Dutton and Blank, 2013, p.22), ONS's **Quarterly Internet Survey** indicates that almost everyone between the ages of 16 and 44 are connected:

Age group	
16-24	99.1%
25-34	98.6%
35-44	97.2%

Table 4.3 *Internet users 16-44 (ONS, 2013b, Table 1b)*

Set against this diminishing problem, **OxIS13** identified the emergence of a new form of divide. The survey examined the attitudes and benefits gained for both NGUs and "first generation users" and concluded that there were growing differences between those two groups:

> "One of the consequences of these trends towards next generation use is a new, growing digital divide between people who are next generation users and those who are not. Next generation users tend to be more effective users of the Internet for leisure activities and also for job and work information. This suggests that the benefits of the Internet will flow disproportionately to them. Their interest in content creation suggests they will disproportionately influence public debates." (Dutton and Blank, 2013, p11)

Thus, close awareness of the nature of connectivity between the individual and the Internet must be a factor of importance when planning and implementing new services.

There is one further point to make about the reach of technology and its accessibility. **OxIS13** sought information on the places where access takes place. The question provided seven options to choose. The *at home* category was cited by 98% of respondents and sits well ahead of the other six. However, the most rapidly growing category, and the one that now sits in a clear second place, is *on the move*, being cited by 57% (Dutton and Blank, 2013, p14). Ubiquitous mobility has implications on how services are designed and what opportunities may be presented to the user as they move through the landscape.

4.4.2 PATTERNS OF USE

All of the survey reports so far mentioned report patterns of use across multiple platforms as part of life in the 21st century. However, to illuminate the range of activities on the most ubiquitous device, Google's annual **Our Mobile Planet** survey, undertaken by Ipsos, is a valuable source. There are several reasons why it is a useful instrument. It provides a consistent snapshot of smartphone use across both the developed and developing world and, equally useful, all of the data gathered is freely available online for local analysis and reuse. One of the questions within the survey asks: "…which of the following activities do you do with your smartphone?" The Table below shows the range and percentage of frequencies cited for UK answers to that question:

Browsed the Internet	83%
Took a photo or video	82%
Emailed (sent or read)	79%
Used a search engine for a general search	77%
Used an application (app)	72%
Looked up directions or used a map	69%
Used a search engine for product search	68%
Accessed a social network	67%
Played games	64%
Listened to music	62%
Watched videos on a video sharing website (e.g., YouTube.com)	53%
Downloaded or bought ringtones, wallpaper, applications (apps) or other content	49%
Searched for restaurants or pubs/bars	46%
Did online-banking or other finance related activities	42%
Read news on newspaper or magazine portals	41%
Purchased a product or service	39%
Searched for travel-information or holidays	38%
Reviewed websites, blogs or message boards	36%
Used online/mobile coupons for shopping	27%
Tethered to a computer (connected a computer to the Internet via my smartphone)	26%
Searched for job-offers	24%
Searched for a flat or house	23%
Watched full episodes of TV programme online	22%

Table 4.4 *Patterns of use of smartphones in the UK, 2013*[40].

Table 4.4 may be read in several different ways. At the most granular level it presents a catalogue of the wide range of activities undertaken as routine using a smartphone: the Network Society in action. At a systemic level, the list demonstrates the dramatic changes that have taken place in just a few years. The ability to use just one mobile device to do so many things only became a reality with the launch of the iPhone in 2007. Yet in the space of just six years the smartphone has become an essential tool to more than half of the UK population. The other surveys report similar patterns of use. **Ofcom14** reinforces the significance of the smartphone reporting that over half of the population uses their smartphone to access the Internet (Ofcom, 2014, p4). **OxIS13** provides an extensive range of data on patterns of Internet usage that are arranged under the following headings:

- Information seeking;
- Entertainment online;
- Buying and using services;
- Creativity and production;

[40] Our Mobile Planet website; UK country datasheet. Available at: http://www.thinkwithgoogle.com/mobileplanet/en/downloads/ [accessed 19th October 2013]

- Use of government services;
- Communications and social networking.

Each of these categories has a number of elements, providing a more detailed analysis of what Internet users are doing. The published report contains retrospective data alongside the current levels of use to show changes through time. For brevity within this thesis Table 4.5 below contains the 2013 figures only (Dutton and Blank, 2013, p25 et seq):

PERCENTAGE OF INTERNET USE WITHIN OxIS CATEGORIES					
INFORMATION SEEKING		ENTERTAINMENT ONLINE		BUYING AND USING SERVICES ONLINE	
Local events	81%	Look at photos	70%	Buy online	87%
Travel plans	80%	Listen to music	65%	Compare products	85%
News	77%	Download music	59%	Travel reservation	75%
Health information	69%	Play games	52%	Find location	74%
Sports information	59%	Watch movies	52%	Bank services	61%
Jobs, work	50%	Gamble	20%	Pay bills	57%
				Sell online	42%
				Order groceries	33%
CREATIVITY AND PRODUCTION		GOVERNMENT SERVICES		COMMUNICATIONS AND SOCIAL NETS	
Post own photos	64%	Pay central taxes	46%	Check email	97%
Social net sites	61%	Govt services info	45%	Instant messaging	73%
Post messages	33%	Schools and educ	44%	Send attachments	70%
Post own videos	22%	Council services	35%	Post photos	64%
Write a blog	20%	Govt policy	31%	Visit social sites	61%
Personal website	18%	Pay local taxes	25%	VOIP	45%
		Info about MPs	21%	Find jokes	44%
				Read blogs	37%
				Post messages	33%
				Chat rooms	30%
				Write a blog	20%
				Personal website	18%

Table 4.5 *Extract of data from OxIS13*

This Table is helpful in highlighting the range of activities reported by Internet users. Checking emails is almost a universal activity while browsing goods and buying online, and local and travel information are all done by 80% or more users. Considering the figures more broadly, it is interesting to note that in the top three categories there are only three activities undertaken by less than half of respondents while in the bottom three there is a wider spread. **OxIS13**, in separating out *creativity and production* and *communications and social networking*, is clearly trying to bring a more analytical approach to the generic concept of social networking (Web2.0), a term that is no longer helpful to understanding behaviours and trends. The report suggests that previous year-on-year increases in social networking have now levelled out between 2011 and 2013 at 61%. Yet, looking at the more detailed information provided within the categories it

is evident that posting photos and visiting social sites both continue to rise in popularity. Using government services remains overall at lower levels than other categories, but the data show that the use of transactional services – paying taxes, TV licences, car tax, council tax – is growing. This trend will certainly be the result of the government's policy of Digital By Default[41] that has created far more customer friendly access to Government services at the same time making clear that the trajectory is towards online only. This increasing use of online transactions for government services is likely also to be influenced by the steadily rising trend for online retail and financial services. **Ofcom14** reports that retail sales online continue to rise with eBay slightly ahead of Amazon for visits in the past year (Ofcom, 2014, p294). It also highlights an important outcome of Internet use – the ability to compress tasks into less time. It reports that while the average adult spends over half their waking time engaged in media or communications activity - over 8 hours a day - with multitasking adds up to over 11 hours a day (Ofcom, 2014, p5).

Regarding patterns of usage it is important to stress that the reports do not seek to explore below the societal level so that engagement with collecting institutions' digital offerings gets hardly any direct coverage. There is only one mention of any institutional type: in **OxIS13** public libraries are included in the list of locations cited for access to the Internet. Embedded in the categories in Table 4.5 collecting institutions may well feature, but there is currently no consistent datasets on their online activities. **OxIS13** does include a broad question about learning that produced the following patterns of activity:

Finding or checking a fact	90%
Investigating topics of personal interest	80%
Look up definition of a word	74%
Get information on school projects	46%
Distance learning for degree or job training	29%

Table 4.6 *Learning related Internet use (Dutton and Blank, 2013, p47)*

Over recent years *finding a fact* and *school projects* remained stable and *definition of a word* and *distance learning* show increases in each edition of the survey. The *personal interest* category has shown a 10% fall over the past four years. The reasons for this are not clear from the survey, but given the role of collecting institutions in informal learning this change warrants further investigation. It will also be of interest to see the extent that distance learning increases further as massive open online courses (MOOCs) become an established part of the learning landscape[42].

4.4.3 THE IMPACT ON BEHAVIOURS AND EXPECTATIONS

So far this chapter has examined collective behaviours and expectations, established and

[41] UK Government Data Service website. Available at**:** http://digital.cabinetoffice.gov.uk/about/ [accessed 31st October 2013]
[42] For example FutureLearn website. Available at: https://www.futurelearn.com [accessed 1st November 2013]

emergent. 24/7 accessibility empowered by mobile access, the range of user activities identified in Table 4.4 that are part of orthodox behaviour for the majority, and the globalisation of connectivity and services are all embedded within the contemporary social fabric. For the individual there is choice to personalise their access experience better to manage their lives. The 75% of Internet users who make travel reservations online will have made a choice not to deal through a local travel agent, just as the use of video streaming direct into the home removes the need to go to the high street video rental store. Such activities give the user more control, the ability to make comparisons and to save time. **OxIS13** reports that 81% of NGUs considered use of the Internet allowed them to save money. At the same time, this freedom of choice threatens the traditional high street trader[43].

Some 10,000 years ago, a shift took place from the hunter/gatherer (foraging) society to an agrarian (harvesting) society (Johnson, 2000). The *agrarian shift* provides an analogy with the present impact of the Internet. The common carrier nature of the Internet, able to accommodate and integrate the widest possible range of media and communication channels, shifts emphasis from individuals as hunters foraging *for* information, to information flowing directly *to* them wherever they happen to be. This fundamental shift in the process of exchange is now habituated within society. It does not replace the desire to visit destinations or to meet people, but it does redefine both relationships and opportunities. Social networking sites such as Facebook make it possible to connect to anyone connected to the Internet who also uses the services. When 14% of the planet's population is on Facebook and 50% of them log on at least once a day, the nature of communication and exchange is transformed from what it was even a few years ago[44]. Tredinnick (2008, p22) comments:

> "Our friends in other continents have become more closely integrated into our lives than our next-door neighbours. It may still be possible to escape the digital world, but it is becoming increasingly difficult to do so every day".

The immediacy of one-to-many engagement for all, defeating distance, has fertilised the many different elements of social networking and those activities that **OxIS13** describes as *creativity and production*. In his book **Cognitive Surplus: Creativity and Generosity in a Connected World** Shirky (2010, p8) writes:

> "The free time in the postwar United States began to add up to billions of collective hours per year, even as picnics and bowling leagues faded into the past. So what did we do with all that time? Mostly we watched TV…
>
> Sure we could have played outdoors or read books or made music with our friends, but mostly we didn't, because the thresholds to those activities were too high, compared to just sitting and watching…
>
> But now, for the first time in the history of television, some cohorts of young people are

[43] See for example BBC transcript on New Listener website. Available at: http://www.newlistener.co.uk/home/high-street-decline-continues-slightly-more-slowly/ [accessed 31st October 2013]
[44] Yahoo website. Available at: http://news.yahoo.com/number-active-users-facebook-over-230449748.html [accessed 4th October 2013]

> watching TV less than their elders. Several population studies - of high schools students, broadband users, YouTube users - have noticed the change, and their basic observation is always the same: young people with access to fast interactive media are shifting their behaviour away from media that presupposes pure consumption."

Of particular interest currently is the process of community engagement usually referred to as crowdsourcing - collective endeavour online. There are now many examples of crowdsourcing, some of which have demonstrated the collective capability of lay people to contribute to research and development. Topics range from galaxy spotting (Galaxy Zoo) to brand design (Pepsi Cola), the design of military vehicles (Adaptive Vehicle Make), transcribing archival records (Old Weather) to contributing memories and memorabilia concerning the First World War (Europeana)[45]. Crowdsourced projects redefine the relationship between an organisation and an external audience opening up two-way interaction where previously none might have been possible. Crowdsourcing remains an emergent set of behaviours, but has already demonstrated the willingness of non-specialist individuals to contribute their time freely to collective endeavour. In some respects such gifting of time and energy is nothing new; volunteering and group activity to help others exists in all communities. What are new are both the scale – numbers involved and the global reach – and the focus on achieving some specialist and often quite abstract outcomes. Further, successful crowdsourcing requires new and open attitudes within the institution to guarantee genuine two-way engagement with the *crowd*.

Ofcom13 identified two further new sets of Internet-enabled behaviours: *media meshing* and *media stacking*. Media meshing occurs when, for example, individuals share their views about television programmes while they are watching them: "…one-in-four UK adults have made direct communication with family and/or friends via text or phone calls about a television programme they are watching" (Ofcom, 2013, p5). Media stacking:

> "…is not only more common than media meshing, but also more frequent. Half (49%) of UK adults claim to conduct other activities while they are watching television…Internet is the most common activity with over one-third of UK adults (36%) saying they have done this while watching television." (Ofcom, 2013, p6)

By 2014 multitasking was being carried out by 96% of Internet users each week (Ofcom, 2014, p6). **OxIS13** has further analysed its data to produce five cultures of the Internet based on the values and beliefs expressed by survey respondents. Table 4.7 provides a summary of the five cultures and the percentage distribution across Internet users:

[45] Wikipedia contains an extensive and annotated list from which these examples were taken. Available at: http://en.wikipedia.org/wiki/List_of_crowdsourcing_projects [accessed 31st October 2013]

CULTURE		%age
e-Mersives	Comfortable and naturally at home in the online world and happy being online. They are pleased to use the Internet as an escape, to pass time online, and think of it as somewhere they can meet people and be part of a community.	12%
Techno-pragmatists	Stand out by the centrality they accord to using the Internet to save time and make their lives easier. Like the e-mersives, they feel in control of the Internet, employing it for instrumental reasons that enhance the efficiency of their day-to-day lives and work.	17%
Cyber-savvy	Express mixed feelings and beliefs about the Internet, holding somewhat ambivalent views. They enjoy being online in order to pass time, find information, and become part of a community in which they can escape and meet people. They also feel as if the Internet is, to a greater or lesser extent, taking control of their lives.	19%
Cyber-moderates	More moderate in their view of the Internet as a good place to pass the time, an efficient way to find information or shop, or a good way to maintain or enhance their social relationships.	37%
A-digitals	Do not feel the Internet makes them more efficient, nor do they enjoy being online simply to pass the time or escape from the real world.	14%

Table 4.7 *Five cultures of the Internet (Dutton and Blank, 2013, p4)*

Whether these five cultural groups are of lasting relevance remains to be seen, yet, given the richness of data used to produce them, they provide greater insight into sets of behaviours, expectations and concerns than has ever previously been available. In the early days of the Internet there was just the one-size-fits-all Cyberculture; later there were digital natives and digital immigrants, followed by residents and visitors[46]. What the five cultures of the Internet show is that there are patterns of use and also that it is possible to interpret data to gain better understanding of the range of behaviours and expectations of Internet users both now and in the future.

Key issues arising from user needs and expectations:

- The most apparent generic societal trend to draw from the evidence on patterns of usage is steady increase across the board. Very few categories in **OxIS13**, for example, show significant falls between 2011 and 2013.
- The adoption of the Internet as the means of undertaking a broad swathe of activities associated with everyday life is now the orthodoxy.
- The NGU (multiple devices, multiple locations) now represents the majority of Internet users (67%).
- The growing take up of mobile computing both in the home and on the move is the result of powerful portable devices, cloud computing and wifi.
- NGUs gain more value from using the Internet than First Generation users, creating a new digital divide.

[46] Oxford University, Technology-Assisted Lifelong Learning website: Available at: http://www.tall.ox.ac.uk/research/current/visitorsresidents.php [accessed 31st October 2013]

- 64% of the UK population now has smartphones that have rapidly become one of the primary tools to access Internet services of all types.
- Many aspects of daily life now depend on access to the Internet. Online shopping is second only to email in terms of popularity and there is a growing take up of other transactional tasks such as banking and government services.
- 81% of NGUs report that using the Internet saves them money while avoiding the need to use a third party (disintermediation).
- The changes in users' behaviours in seeking information and services may be compared with the social progression from hunter/gatherer to agrarian societies in earlier times.
- The Internet has redefined users' relationship with space and time allowing multitasking, with social interactions and social networking tools making possible global communities and cost-free one-to-many communication.
- Further, these interactions have made possible new forms of social collaboration (crowdsourcing) where citizens gift their time in support of some collective purpose.
- Successful two-way collaborative engagement depends on institutional norms and values that accommodate and encourage new relationships with audiences.
- New multi-tasking behaviours are emerging – media meshing and media stacking (**Ofcom13/14**), along with new interpretations of expectations and attitudes defined by the Five Cultures of the Internet (**OxIS13**).
- **OxIS14** demonstrates that it is possible to gain richer understanding through data analysis to disaggregate user expectations and behaviours.

4.5 FOUR GENERIC DRIVERS OF CHANGE

4.5.1 THE DRIVERS OF CHANGE IN CONTEXT

Section 4.1.1 summarised the scope and structure of the chapter, explaining that the aspiration was to identify a small number of attributes in the outer world that represent the unique drivers of socio-technical change; the intention being to evince from the evidence key characteristics that define *how* and *why* innovation and change take place rather than presenting possible future scenarios in the form that trend analysis seeks to achieve. Trend analysis provides often thought-provoking visions of the effects of socio-technical change at some future time, illuminating challenge and opportunity to individuals, institutions and society (ARUP Foresight, 2013, 2015; Curtis, 2011; New Media Consortium, 2013, 2014; International Federation of Library Associations (IFLA), 2013; Barber, 2013; Facer, 2009; Merritt, 2014). It is important to make clear the distinction between such documents and the intentions of this current research. The trend reports cited investigate *what* the future might be like. Only the two horizon scanning documents from the New Media Consortium (NMC) provide a sense of what actions practitioners and policymakers might take to gain advantage as their purpose is to highlight technological challenges for museums (NMC, 2013) and academic libraries (NMC, 2014) over a

five-year time horizon, not to explore wider social effects over the long term. Trend reports very seldom examine closely the unique characteristics of Internet technology (the DNA) that fuel socio-technical change. Yet, without such understanding it will be difficult for any organisation, whether private or public, to make practical decisions about the actions necessary to attain strategic fit in any or all of the possible futures. The lack of clarity in trend reports on how organisations deal successfully with socio-technical change constrains their practical value. This observation is underlined in the literature reviews and analysis undertaken in Chapters Eight to Eleven, where the various trends reports on museums and libraries have engendered little subsequent interest or action to review future possibilities.

In Chapter One it was made clear that research should lead to action, offering practitioners and policymakers tangible ways to develop a pathway from the present into the increasingly digital future. The intention is to provide tangible means for practitioners and policymakers to build a bridge between the present and the future. The approach focuses on developing strategic management and planning for digital innovation as essential requirements for practical exploration of possible futures. There are, therefore, a necessary precursor of trend analysis. If the generic drivers present immutable characteristics of all Internet activity they make possible definition of the relationships, structures and operational practices that offer collecting institutions maximum opportunity to develop in the digital space.

In Part Three the generic drivers will be used as benchmarks to compare the present service models of museums, libraries and archives with the characteristics of the Internet, describing both opportunities to be taken and challenges to be faced. Chapter Sixteen offers a strategy for all collecting institutions to work together to create a shared, long-term digital strategy and structural mechanisms of delivery. It is at that point trend reports become an important element of the planning process. While none of the studies cited above addresses the collective future of museums, libraries and archives, they contain much that will be directly relevant to strategic planning for all collecting institutions. The future of higher education (Barber, 2013) and of schools (Facer, 2009) are both important to the formal and informal learning roles of collecting institutions. The convergence, of supply and demand, implicit in five key trends described in the IFLA study of the emerging information environment support both Barber's and Facer's views on the democratisation of learning in the digital space and additionally underline how the two-way interactivity of the Internet will empower new voices and groups. The IFLA study also points to the disruption of traditional information service models with the emergence of a global information economy (IFLA, 2013, p3). These are trends equally relevant to museums, libraries and archives and resonate with conclusions drawn in Part Three of this research. The institution-specific studies, for example, Merritt (2014) on museums and Curtis (2011) on academic libraries present long-term trends describing possible future service scenarios offering productive material for strategic debate.

This rich seam of material will, however, only be useful if it is grounded within a mechanism for collective strategic management that this thesis seeks to develop. As noted above none of the

cited trend analyses or futures studies has led either to significant action or wide debate. Neither is there any strategic management framework to assess how such documents relate across all collecting institutions and what gaps in research have yet to be filled.

4.5.2 CREATING THE FOUR GENERIC DRIVERS OF CHANGE

The extensive range of evidence in this chapter produced 36 key issues. Such a lengthy list, while essential to an understanding of the complexities of the socio-technical determinism driving change, is unwieldy as a mechanism for comparison with the Institutional Paradigm developed earlier in this chapter. There are many assertions that might be made about the socio-technical determinism of the Internet. For example, the various forms of strategy and innovation considered in Chapters Eight to Eleven establish distinctions between sustaining, disruptive and transformative innovation. Such distinctions are important to understand change – the ways in which innovation has impact on both the supply and demand. In this chapter conclusions are presented concerning both social and geo-political effects on markets, organisations and national boundaries. Some of those effects are derived, the result of something else happening, and some may be considered as basic statements that enable the derived effects to take place. The private sector examples of new service propositions explain how radical change can take place in the relationship between the supplier and the user empowering innovative business models alongside new opportunities for the user/consumer. These are derived effects dependent on more basic and generic characteristics of the Internet. Equally, new user behaviours and expectations such as the 24/7 effects of mobile platforms and the emergence of social media innovations depend on the same generic characteristics.

While 36 key issues is too large a number to employ them all to the creation of drivers of change without further analysis, it is a small quantity of data on which to apply formally a comparative method such as Grounded Theory (Glaser and Strauss, 1967, p23). Nevertheless, Grounded Theory principles of tagging, assessment of relationships and review (Bryant and Charmaz, 2007, p12) have be applied to the key issues to assess whether, based on the evidence, the concept of dependency relationships is a valid model for the definition of a small set of generic drivers. Following this process it was possible to place the key issues into just two tagged categories – *outcome effects* arising from the Internet technology *and basic features* of Internet technology. The result of this tagging analysis of the key features was 31 *outcome effects* relating to business models, innovation, and user behaviours and five *basic features* of Internet characteristics:

- Perceptions of time have changed in relation to social behaviours and the speed with which change takes place.
- Networking has led to the globalisation of the most successful of these services.
- Frictionless innovation - organisations creating Internet-based consumer offers are able to achieve success without many of the traditional barriers to innovation.
- The Internet has made possible both the integration of many different channels of communication into one single channel and enabled frictionless two-way

communication across that channel.

- This two-way connectivity has provided opportunities to empower everyone to express themselves, individually or collectively, and thus begin to make more explicit public opinion as well as differing views.

The concept of Necessary Cause*,* "…when causes for an outcome are essential – the outcome does not happen without them – we call them necessary causes." (Kinkaid, 2012, p59) used in the philosophical theory of causality was then used to establish whether it would be possible to observe all the 31 effects if the five characteristics listed above did not already exist. This questioning demonstrated that all of the 31 outcome effects were dependent on the existence on the five basic features.

The application of coding and logical causality must, of course, be influenced by the structure and scope of the evidence in the chapter. By its nature interpretive research must be selective and alternative perspectives might identify different key issues. However, the task of identifying key characteristics of the Internet against which to assess collecting institutions' ability and readiness to develop practical digital strategy has produced a limited number of significant issues from which it has been possible to create three generic drivers that describe three fundamental characteristics of the Internet and a further driver that draws together all the social/organisational effects described in the other 31 key issues, focused in the changing relationships across the boundary exchange between services and users/customers.

4.5.3 GENERIC DRIVER 1: THE INTERNET AS DIGITAL COMMON CARRIER

The common carrier effect is, perhaps, the most fundamental driver of the digital revolution. The Internet is common in two respects. First, it enables two-way, instant transmission of many different media forms, so that where once film, video, images, text and sound had different physical and presentational formats, it is now possible to send, integrate, combine (mix and mash) and interpret them within a single environment. Second, it is common in the sense of being a global standard based on IP protocols that assure the technical reliability of data transmission and exchange. There are no competing Internets; every connected point on the planet forms part of the same network.

Before there was the Internet a range of different communication channels – physical and electronic - served the exchange of ideas (printing of newspapers and books), commercial activity (High Street retail, service industries and supply chains) and entertainment and communication (telephone, post, radio, television and movies). Chapter Four describes a wide range of effects enabled by the Internet, allowing existing businesses to extend their service propositions through presence on the Internet and for the emergence of completely new services. The chapter made the point that there continues to be a mix of evolutionary progression and transformational change. For the High Street retailer, for example, online presence might extend their audience reach, allowing ordering direct or browsing prior to visiting a store, providing a service mix of destinations and devices. However, the effect of the common carrier network has been also to produce online retailers who have no High Street presence;

who trade solely on the Internet, reducing transaction costs by avoiding the need for destination stores. Equally the interactive mixing of media forms on the common carrier networks has made possible social networks such as Facebook. All of these derive from the Internet's ability to create convergence and interaction, drawing together different media and resource types.

Another factor important to highlight in considering the effects of the common carrier is that where once different activities and services inhabited different places, the convergence of delivery of so many different types of often competing services – informational, travel, retail sales, financial – has made possible new services able to provide up-to-the minute price comparisons, plus forums where users are able to post their opinion of the goods and services available. The standardisation of formats within the common carrier and its interactivity has also made possible search engines and user-generated resources such as Wikipedia. The key features of the digital common carrier are summarised in Table 4.8:

1. The Internet as Digital Common Carrier	
Single channel:	A common, multi-purpose worldwide network
Internet protocol:	The common transmission standard enables the integration of resources of many different types
Convergence:	Mechanism for harvesting and aggregation enabling search engines, comparison services improving consumer choice, resource reuse and user produced content.
Instant two-way communication	Empowers the user to engage and to interact

Table 4.8 *– The Internet as digital common carrier*

4.5.4 GENERIC DRIVER 2: THE INTERNET REDEFINES SPACE AND TIME

For most of the 20th century the telephone system was the only means of real-time exchanges between individuals in remote locations, with the constraints of pricing mechanisms based on distance. The instantaneous and interactive nature of the Internet, just like the telephone system, enables real time exchanges between people and organisations, supporting one-to-one and one-to-many interactions. However, the marginal cost of contact is independent of distance and the interactions take place between digital devices connected to the common carrier so that the relationship between the individual and the external world becomes, at the same time, one of recipient and broadcaster – harvester rather than hunter, one-to-many or one-to-one − able to interact wherever and whenever they wish. Online relationships do not depend on opening hours or the need to travel, increasing accessibility and choice for the individual, at lower transaction costs. For the supplier, the ubiquitous nature of the Internet means that new audiences may be reached at no more than marginal cost; phenomena that apply equally to collecting institutions.

There is one further point concerning space and time effects germane to understanding the challenges facing collecting institutions. This is the relationship of Internet Time with conventional time. This phenomenon was examined in Section 4.3.1 where the speed of

innovation and subsequent social diffusion was described. Back in 2001 Wellman suggested that Internet Time was running at "dog time" – seven times faster than normal human time (Wellman, 2001, p2034). More recently other commentators have demonstrated that this rate of change has continued to increase (Karpf, 2012). Additionally there are recent indications that these technologies are increasing the ability of the individual to fit more activity into a given time period by multi-tasking (Ofcom, 2014, p5). This pace of innovation and diffusion has, of course, big implications for organisations that exist within large, siloed structures where freedom of action may be constrained. These effects are presented in Table 4.9:

2. The Internet redefines space and time	
Instant connectivity:	Connectivity to any node on the global network defeats the concept of distance
Internet time:	Creates rapid innovation and diffusion within society
Users:	Are able to compress more activity into a time period
Transmission costs:	Costs are independent of distance and time

Table 4.9 *The Internet redefines space and time*

4.5.5 GENERIC DRIVER 3: THE INTERNET POSSESSES ITS OWN GRAVITATIONAL FORCES

The successful get big, the big get bigger. Chapter Four provided several examples of the centripetal effects on users of successful online services. Examples included iTunes, Facebook and Abe Books. It is Abe Books that demonstrates most clearly the impact on both supply and demand of the massification effects of the gravitational forces. Abe Books' aggregation of secondhand bookshops' stock holdings makes those holdings instantly accessible to a global market. The searcher harvests from the whole database instantly, rather than journeying as a hunter in hope. This is a transformative business model derived from gravitational forces working to the benefit of both the supplier and the user.

3. The Internet possesses its own gravitational forces	
Scale:	Successful services get big through social media and other mechanisms of viral marketing
Growth:	The big get bigger, creating few global successes
Impact:	The gravitational force affects both the supplier and the user

Table 4.10 *The Internet possesses its own gravitational forces*

4.5.6 GENERIC DRIVER 4: THE INTERNET REDEFINES THE RELATIONSHIP BETWEEN THE SUPPLIER AND THE USER

This fourth generic driver addresses the ways in which the Internet has changed the behaviours and expectations of users and suppliers through the ways in which exchange relationships are developing. This chapter has identified a number of effects having significant impact on the suppliers of goods and services on the Internet. These range from minimal entry barriers to innovators exploiting the interactive and integrating capabilities of the digital common carrier

and the low costs of failure empowering individuals to develop new, successful service propositions that become global successes due to the effects of viral marketing and gravitational forces (Section 4.3.4). New transformative business models have emerged that challenge the future of established industries (recorded music, news media) or have enabled existing service areas such as the retail trade to provide successful online offers alongside their traditional outlets. Here again the effects of Internet gravity have demonstrated that in some areas of retail, highly effective online traders, such as Amazon, with global reach, have left High Street names unable to compete. More than ever, service propositions succeed by demonstrating the importance placed on servicing the user effectively, with good design and personalisation of service (Section 4.3.4). The two-way nature and immediacy of communications − redefining space and time – has enabled suppliers to understand user behaviours and needs much more closely, creating the science of user engagement. Willingly or not the user becomes valuable partner and co-creator. A further effect for the supplier is the need to redesign business processes and particularly employ new skills sets focused on the design of services that are truly user-centred both in terms of usability and relevance (Chapter 4.3.1; 4.4). Designing to meet the needs of the user, even changing their behaviours and expectations in the process, calls for close understanding of both sides of the boundary exchange with systems and human resources able to translate that understanding into successful services.

Considering the user in the exchange relationship, the most noteworthy evidence from Section 4.4 is the speed with which the Internet (and the user) have become integrated into all aspects of online social and business life. Innovation and diffusion are now counted in months where in previous centuries the timescale would be decades or more. The expectation of access 24/7, the ability to harvest services from any location and the ready acceptance that online services and technologies will be in a constant state of development - *never out of beta* - would have been unthinkable for most people in 2000. Activities such as work, shopping, entertainment, social interactions and collective activities are becoming disconnected from the concept of travel to a distant location (Section 4.4.3), and all within a single, multi-tasking, real-time channel:

4. The Internet redefines the relationship between the supplier and the user	
Innovation and risk	Many successful online services have been the result of a good idea initially tested with minimal overheads and with the ability to evolve through user testing. Failure costs may therefore be low, encouraging experimentation. Online services are readily scalable and offer low transaction costs, increasing contestability and competition, seeding new forms of business models and more innovation. (4.3.3)
User focus	Understanding user needs and expectations is central to success. Services must be user driven; Science of user engagement makes possible closer understanding of user behaviours and needs. The user can be valuable partner and co-creator. (4.3.1; 4.4)
Skills shift	With evolving technologies and user expectations and behaviours new supplier skills may be required, in innovation, design and user understanding. The user may also become a contributor to the supply stream (4.3.4; 4.4)
User effects	Always on, 24/7 services where convenience may trump comprehensiveness and trust. (4.4)

Table 4.11 *The Internet redefines the relationship between the supplier and the user*

4.6 CONCLUSIONS AND SUMMARY OF CHAPTER FOUR

Chapter Four has focused on investigating the 'outer world' of collecting institutions – the external factors to be considered when developing strategic plans for the future and has evinced from the evidence four Generic Drivers of Internet change (hereafter referred to as the Generic Drivers of Change). The following chapters turn to the 'inner world' of the institutions to explore their perceptions of strategic futures and the degree to which through direct engagement in the digital space they appear to be prepared to take advantage of the dramatic technical and social changes wrought by the creation of the Network Society. The evidence from this review will be used in Part Three first to develop generic principles from the evidence and then to compare the principles with the outcomes of the analysis of the contemporary relationships between collecting institutions and the digital space.

CHAPTER 5
Institutional Mission and Purpose

5.1 CHAPTER PURPOSE

Following the exploration of the outer world in Chapter Four, the rest of Part Two of this thesis examines the inner world of collecting institutions, their practices, missions, similarities and differences, structures, power, practitioner norms and values and commitment to respond to external change. Chapter Five contributes to Research Objectives Four and Five:

COLLECTING INSTITUTION ANALYSIS CHAPTERS THREE TO ELEVEN	
Objective	**Scope**
RESEARCH OBJECTIVE 4 Identify the form, components and priorities across collecting institutions that define and direct existing service propositions	• Examine organisational structures • Knowledge policy, wider policy, power structures, and clarity of service missions in relation to public policy • Values and norms as reflected in professional literature linked to institutional purpose and digital innovation
RESEARCH OBJECTIVE 5 Review examples of the development of digitally based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change	• Commitment and ability of institutions and practitioners to change their service worldviews in the face of external change • Examples of engagement with digital services • Review research on innovation and the diffusion of digital services provided by collecting institutions
METHODS: Textual analysis, literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 5.1 *Research Objectives Four and Five*

The chapter analyses contemporary documentary evidence created by policymakers and practitioners to examine the form and nature of policies and practices to build a picture of how those actors articulate institutional purpose, and the degree of convergence across collecting institutions. The chapter applies techniques of textual analysis to two types of evidence:

- Documents from professional associations, governmental and other policy bodies across the UK and a small number of relevant international documents.
- An audit of the websites of UK public collecting institutions to identify whether institutional mission statements are available to the public and, if so, what is their content.

In Part Three of the thesis the outcomes of the chapter will be used to address the following three questions:

- How is purpose defined within mission statements, policy guidance and advice on best practice provided by professional agencies?
- Does the evidence support the creation of a Shared Mission Statement that embraces all three institutional types in support of a collective digital strategy?
- How effectively do service managers present their services and institutional missions to their audiences?

An analysis of such documentary evidence at the atomic level of word use and its subsequent synthesis into broader patterns of associations, affinities and dissonances should contribute to an understanding of the norms and value systems held by those managing collecting institutions. It should also uncover any components of common purpose across different institutional forms. Appendix 5.2 contains a detailed Methods Statement.

5.2 CONTEXT, PROCESS AND PRACTICE

In their operation of services from physical locations, museums, libraries and archives have different histories, defined very much by the nature of the collections they were mandated to build and curate in support of social value. Today across the UK, despite the work of ALMA-UK[47], there is no formal mechanism to provide a policy forum embracing all types of collecting institutions able to explore collaboration and convergence around shared digital challenges and opportunities. Appendix 5.1 tabulates a range of organisations and their relationships across the three sectors. The appendix is not intended to be comprehensive – there are many regional and subject specific groups involved in service development – but to highlight the heterodox nature of collecting institution policy and practice across the four Home Nations. There are a few collecting institutions that engage directly with all four nations. There are institutions that are accountable directly to a government department (national libraries and museums) while others remain relatively free from outside direction (independent museums). Additionally there is a patchwork of institutional clusters – university libraries, public libraries, national museums, records offices, community archives, regional and local museums – within public organisations and in receipt of public revenue funding, or independent, but supported by grant aid.

Across the three sets of institutional forms, there are significant differences in their relationships with accountable bodies that increase the complexity of sample identification and analysis. The following examples may serve to highlight this. In relation to libraries, all of the accountable bodies surveyed – local authorities, universities, national collections – were known to provide a library service and therefore, of the institutions surveyed, there is a simple arithmetic relationship between those with a mission statement and those without. For archives, the majority of local authorities and universities have archival collections, but they may vary in form and description. There may be a record office or local history collection within a local authority

[47] ALMA-UK**:** Archives, Libraries and Museums Alliance UK – an informal grouping of interested agencies from the four Home Nations. While active in discussions on digitisation, service value and staff development it holds no mandate to represent all collecting institutions UK-wide. Available at: http://almauk.org/ [accessed 23rd April 2013]

and within the university there will be special collections; but these are not always clearly identified as being archives. So in this case some caution is required in making judgments about overall numbers. For museums, the same constraints apply – local authority museums may be 'arms length' and university museological collections may be managed within some other department within the university. With museums there is the additional risk of double counting since a search for museums within local authorities and universities may identify collections that are also recorded in the ACE accreditation list, the most comprehensive list of museums in the UK[48]. Consequently, care has been taken to ensure that for museums, duplication between the ACE list and local authorities, universities and government sponsored has been removed and that in drawing conclusions from the evidence gathered caution is needed not to overstate beyond what the data actually indicate.

To date there has been neither comprehensive study of the range of policy and guidance information available across all collecting institutions nor any comparative study of the declared missions of those institutions. Textual analysis offers a means of identifying patterns across this heterodox landscape.

5.2.1 THE ROLE OF TEXTUAL ANALYSIS

Across the last ten years, the increasing power and usability of computing has led to its growing application to research in the humanities. Jones (2013) argues that the concept of digital humanities was in common use by 2004 and has since become an academic discipline in its own right. Terras, Nyhan and Vanhoutte define digital humanities as, "…a combination of using computer technologies to study human cultures and studying the effects of computers on human cultures." (2013, p294). Gardiner and Musto (2015) describe five key processes for which digital techniques are particularly valuable: classification, documentation (including tagging), manipulation, interpretation and aggregation. Examples of projects in the University College London Centre for Digital Humanities[49] include:

- Dynamic dialects – corpus of synchronised audio and video for phonetic training, language teaching and speech therapy
- Slade Archive Project – project to study how the archive of the Slade School of Fine Art might be exploited
- CELM – Catalogue of English Literary Manuscripts 1450 – 1700

Corpus linguistics is a branch of digital humanities using computer techniques to compile and analyse bodies of text (Kennedy, 2014). The use of digital technologies has made possible the creation of extremely large corpora of text that may be coded and manipulated in ways

[48] Arts Council England. 2015. Statistical Report; Accreditation. London: Arts Council England. Available from: http://www.artscouncil.org.uk/media/uploads/pdf/Statistical_Report_-_2015-06-25_Accreditation.pdf. [Accessed 20th July 2015)

[49] University College London, Centre for Digital Humanities home page. Available at: http://www.ucl.ac.uk/dh. [Accessed: 14th February 2015]

impossible using manual means. For example, the Oxford English Corpus contains almost 2.5 billion words:

> "It represents all types of English, from literary novels and specialist journals to everyday newspapers and magazines and from Hansard to the language of blogs, emails, and social media. And, as English is a global language, the Oxford English Corpus contains language from all parts of the world – not only from the UK and the United States but also from Ireland, Australia, New Zealand, the Caribbean, Canada, India, Singapore, and South Africa."[50]

The scope of the Corpus makes possible comparison of language use in different countries and cultures and also tracking the changing use of language through time. The Oxford English Corpus continues to develop, capturing much of its data directly from the Internet. Other corpora present snapshots of language at a particular time. For example, the Brown Corpus[51] contains a million words extracted from material published in the US in 1961. Underpinning the success of corpus linguistics are the capabilities of computing to build and manipulate very large databases.

In his case study on the creation of a corpus based on transcripts of CNN broadcasts, recognising the importance of scale to the effective generation of patterns of language use, Hoffmann writes:

> "It is therefore no surprise that scholars have been drawn to the world wide web as a potential source of additional data. Indeed, if the catchphrase 'bigger is better' fully applied to corpus linguistics, the Internet would have to be considered a near-perfect source." (Hoffmann, 2007, p69)

However, he then draws attention to the fact that the reality of the Web, both messy and constantly changing, challenges the traditional analytical processes of linguistics. Berry also notes that the quantity of data available on the web raises new issues for scholars such as historians, who must "grapple with abundance, not scarcity" (Berry, 2012, p11). However, his key message is the need to take up these challenges by developing new computational tools that provide a stable basis for linguistic analysis. In a much earlier work on corpus linguistics Biber, Conrad and Rippen (1998) support the importance of word tagging as the foundation of digital computation corpora. Both the discipline of digital humanities and corpus linguistics provide a basis on which to develop processes of textual analysis for this chapter. The challenges of dealing with textual evidence from the Internet, techniques of comparative analysis, synonym recognition through text manipulation, word cloud mapping and word tagging are applied to the textual analysis that follows.

In the context of this chapter the direct application of corpus linguistics applications is avoided, first due the very small scale of the aggregated dataset created (some 26,000 words) and second since the primary task is to reduce the dataset to those words that are most frequently

[50] Oxford English Corpus home page. Available at: http://www.oxforddictionaries.com/words/the-oxford-english-corpus. [Accessed 25th February 2015]

[51] Brown Corpus at the Internet Archive. Available at: https://archive.org/details/BrownCorpus. [Accessed 14th July 2015]

used across all collecting institutions. These circumstances have led to a method based on Excel tools, reflecting processes to deal with unstructured data within the NVivo software package[52]. This approach provides for the researcher a very clear understanding of emergent patterns and differences that could be mapped in word clouds and frequency charts. (All stages of analysis and synthesis are included in the appendices to this chapter).

5.2.2 DATASET SOURCES AND SCOPE

It is essential to make clear what are the sources used to build the datasets and also what boundary constraints are applied to those sources.

i) **Selection of data sources.** Part Two of this thesis seeks to create a series of perspectives on the current roles, purposes and processes of collecting institutions with which to make comparative analysis with the socio-technical determinism apparent in the outer world, described in Chapter Four. Chapter Five aims to analyse the *documented voices* of practitioners and policymakers. While, as noted in section 2.3.3, traditional ethnographic methods of observation and interview are inappropriate to the scale of the systems under review, analysis of documents created by those practitioners and policymakers should provide insight into their aspirations, service priorities and the social and policy frameworks within which they work, including focus on digital strategy and inter-institution collaboration. The two data sources are considered further below:

- **Documentary Review**: Strategic and policy documents from government and other agencies are important to an understanding of the present and future of collecting institutions. Many of the documents with extracts included in this process of textual analysis are also analysed in detail as a part of the holistic strategic review that forms Chapters Eight, Nine and Ten.
- **Mission Statement Survey**. The Mission Statement Survey required more elaboration both in terms of reasons for the focus on mission statements and the means of their selection. Mission statements have been in wide used within the private sector since the latter part of the last century and have been studied for at least the past 20 years (Blair-Roy, Wharton and Goodstein, 2011). They have also become an increasingly significant component of strategic planning processes within the public sector (Mulgan, 2009; Ison, 2010; Chapman, 2004). However, there remain conflicting views about the purpose and utility of mission statements. In their detailed study of the impact of mission statements on financial performance, Desmidt, Prinzie and Decramer begin by asking, "…are mission statements a valuable management instrument or just another empty bureaucratic activity?" (2011, p470). They point to work by Bart (1997) that found that in a survey of 88 companies, only 8% of senior managers thought that their mission statements were clear and self-evident, and a public sector study in Flanders by Vandijck, Desmidt & Buelens, (2007) that:

[52] NVivo for Mac home page. Available at: http://www.qsrinternational.com/products_nvivo-mac.aspx. [Accessed 17th March 2014]

> "…health care managers felt that their mission statement had no significant positive influence on the day-to-day behaviour of their organisation nor that members throughout the organisation are committed to the mission statement." (Desmidt, Prinzie and Decramer, 2011, p470).

While these issues may place constraints on the value of the mission statement as a management tool, other writers point out that there is external value making clear to the user/consumer what are the organisation's purpose and aspirations (Checkland, 2006; Campbell, 1997; Keeling, 2013).

Alongside the obvious fact that the institutional mission statement represents the voice of the service managers and therefore contributes to an understanding of the language that they use to define purpose, it also represents what they want to tell their users about the service and the value it offers to those users.

Regarding the criteria to be applied in deciding whether or not an institution has a mission statement, two conditions are applied. The first is whether such a statement can be located through the institution's website. The second is a means of establishing whether a text *described* by the institution as a mission or vision statement actually meets some generic definition. Bart, whose study of mission statements on the Web has provided a useful guide to this aspect of the research, defines the mission statement as:

> "…a formal written document intended to capture an organisation's unique raison d'etre. It should answer such vital questions as: why do we exist, what is our real purpose and what are we trying to accomplish". (Bart, 2001, p360)

This suggests statements that merely describe what the organisation does cannot be counted as missions. Wallace makes the following points:

> "Everyone knows what libraries and librarians do, right? They acquire and organize books, CDs, videos and other materials. They check out books. They answer questions. They assist researchers. They plan programs. They preserve our cultural heritage. They teach students to be information literate. Yawn. Librarians do their best to provide something for everyone, or at least for their clients. But too many brochures and websites rely on itemized listings of services to tell the library's story. A succinct statement of the library's unique contribution is seldom found." (Wallace, 2004, p9)

What counts as a mission statement within this research, therefore, focuses on uniqueness and purpose beyond the collection itself. What is it that the institution is there to accomplish? The test is whether alongside any description of the services provided, there is qualification of why they are provided; and to what ends.

ii) **Boundary constraints**. Both the Mission Statement Survey and the Documentary Review cover the whole of the United Kingdom. In the Documentary Review a small number of international agencies' policy documents are used where they impinge directly on the operation of UK institutions. For both aspects of the textual analysis it was important to define what concept of *public* should be applied. In many aspects of public policy it is relatively easy to

identify what services are funded directly by government (national or local) and why they are funded in the cause of social or public good. Moore (1995, p30) sees public policy as legislative mandates to guide public sector production, "…specifically because they define collective aspirations", while Lane (2000, p31) suggests that:

> "…public policy must be employed to assure the allocation of merit goods, that is goods that are meritorious according to some standard set by public policy."

Many collecting institutions are directly funded from the public purse to achieve some collective merit good. Equally, some of those institutions are expected to reduce their call on the Exchequer by attracting external funds from sources such as donations, bequests and sponsorship. National museums are high profile examples of institutions able to attract external funds. They are still seen, however, as services operating within the public sector and bound by whatever policy directions they may be given. Within the museums sector there are other institutions that depend mainly on non-public funding, but are still able to seek grant aid to develop and deliver services that might contribute to the collective aspiration. A general requirement for gaining such grant support, from organisations such as the Heritage Lottery Fund[53], is that they meet the requirements of the UK-wide Museums Accreditation Scheme (Arts Council England, 2011b). Both directly funded and independent museums may apply. Those independent museums that are accredited are included within the sample used for identifying mission statements since they have committed to contributing to the provision of merit good services.

5.2.3 DATA GATHERING

This section describes the approaches to data gathering for the Documentary Review and the Mission Statement Survey.

i) **Sources for the Documentary Review:** This activity aimed to understand the purposes and priorities of collecting institutions from four different perspectives:

- Dictionaries and Wikipedia;
- Definitions prepared by professional agencies (UK and selected international agencies);
- Recent policy guidance documents from governments (Home Nations);
- Standards and accreditation schemes (UK-wide, Home Nations).

The search strategy described in Section 3.3.2 was used to identify original sources and links to further sources that might be relevant. In total 77 relevant documents were identified, 20 for museums, 31 for libraries and 26 for archives[54]. All documents were read to establish elements of the text relevant to an understanding of the nature and purpose of collecting institutions. Text extracted for analysis amounted to a count of just under 11,000 words.

[53] Heritage Lottery Fund home page. Available at: http://www.hlf.org.uk. [Accessed 19th February 2014]
[54] **Details of the sources** and the text identified are provided in Appendices 5.3 - 5.29 that contains full details of data gathered and the various stages of analysis.

ii) **Sources for the Mission Statement Survey** Table 5.2 summarises the numbers of institutions and accountable bodies identified and the samples applied recognising the need to avoid the duplication referred to in section 5.2.1 above (valid at January 2013):

INSTITUTION TYPE	ACCOUNTABLE BODIES	TOTAL SAMPLE
MUSEUMS		
Local Authority	205	205
Accredited	1758	218
Higher Education	136	19
Govt. Sponsored	40	40
LIBRARIES		
Public Libraries	206	206
National Libraries	3	3
HE Libraries	136	29
ARCHIVES		
England	159	159
Home Nations	57	57
HE Archives	137	30

Table 5.2 *Sample for Mission Statement Survey (Appendix 5.3)*

In total 966 websites were searched for mission statements. The perspective adopted by the searcher was of a purposeful member of the public interested to establish what was the long-term purpose of any particular collecting institution. The result of this process was text adding up to almost 15,000 words.

5.2.4 DATA PROCESSING

First, it is important to stress that the analysis is semantic rather than contextual – meaning being derived from individual words (and where appropriate compound nouns and qualifiers) rather than from the overall meanings of sentences and paragraphs. The value of this form of word analysis is at once analytical and systemic; the frequency of common words across libraries, for example, implying a collective worldview. At a systemic level it can provide a foundation for comparison between different worldviews and different institutional forms. It is equally important to note that while the preliminary analysis of the data has been done in two separate parts – Documentary Review, Mission Statement Survey – subsequent synthesis aggregates the data in one or more combinations. It is therefore essential that both sets of data are consistent (see Appendix 5.2 for Methods Statement).

Different approaches for the capture of source text were taken for the Documentary Review and for the Mission Statement Survey. In the former, the relevant text was cut and pasted from the online source into Word tables clearly identifying both the source with the target text. For the Mission Statement Survey the task was a lengthy search process, since many of the statements were buried deep within About Us sections of websites. Statements were copied into Word

tables with the name of the institution identified. An additional review of the data from mission statements was undertaken to establish, as far as was possible with close to 400 separate statements, whether they met the requirements set out in Section 5.2.1. The outcome of these first stages of analysis were 17 tables of data as follows:

DOCUMENTARY REVIEW	
Museums	• Dictionary definitions • Professional agency definitions • UK policy definitions • UK standards definitions
Libraries	• Dictionary definitions • Professional agency definitions • UK policy definitions • UK standards definitions
Archives	• Dictionary definitions • Professional agency definitions • UK policy definitions • UK standards definitions
MISSION STATEMENT SURVEY	
Museums	• Govt. sponsored statements • Non-sponsored statements
Libraries	• Public libraries • National and HE libraries
Archives	• Archives

Table 5.3 *Datasets generated by both elements of the review process*

The *government sponsored* category included those institutions with revenue or grant-funded direct from national government. To ensure integration across the two elements of the research, a single Excel workbook analysis framework was created to manage all data processing allowing the easy integration of the analysis outcomes. A workbook was created for each of the datasets in Table 5.3. All 17 datasets were analysed in the same way to produce word lists that were anonymised, cleaned of all irrelevant words (such as conjunctions, articles, proper nouns, some adjectives), and checked to remove synonyms. Following this stage it was possible to produce graphic representations of word frequencies (Wordles), categorising the most frequently used words to enable comparisons across different datasets. (See Appendices 5.4 and 5.8). Categorisation was based on the Open Systems Transformation Model, described in Chapter Three:

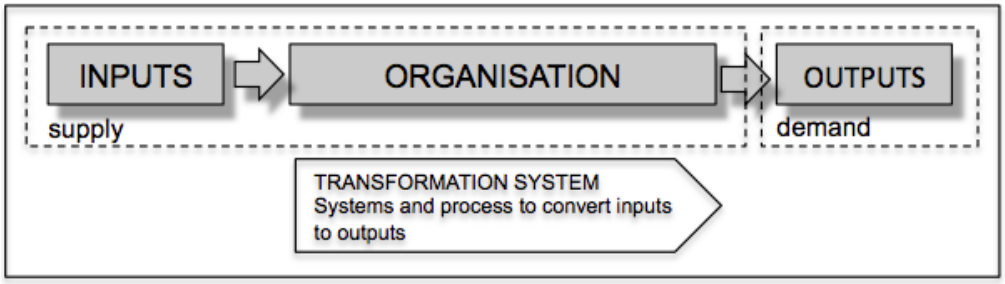

Table 5.4 *Open Systems Transformation Model (adapted from Kast & Rosenzweig, 1974)*

Having reviewed the datasets, five categories were developed relating to the internal collection-related processes of the institutions and to the relationship between the services delivered and their effect/impact on users – the boundary exchange[55]. The categories are shown in Table 5.5:

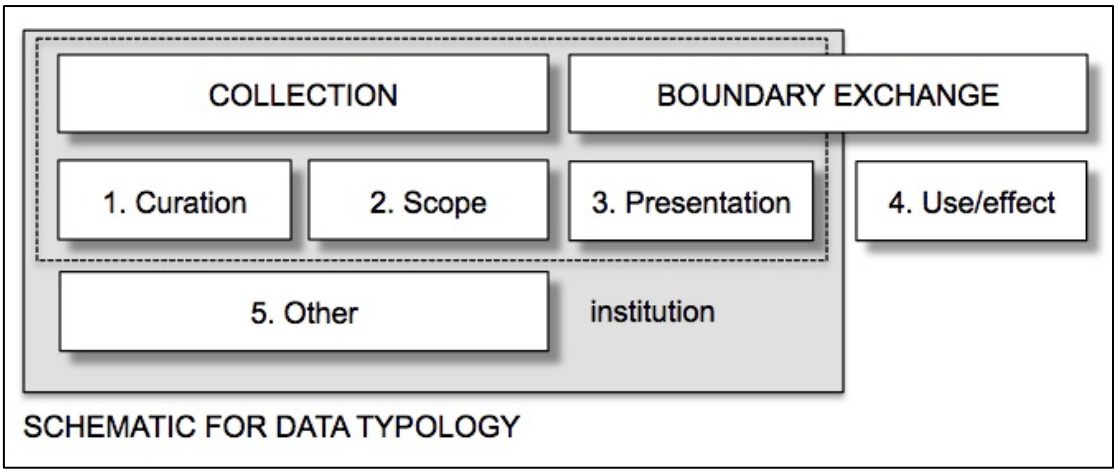

Table 5.5 *Categories for text tagging*

At this stage the analysis shifted from the identification of synonyms within the three institutional datasets to consider the affinities[56] of words.

5.3 MISSION STATEMENT SURVEY

5.3.1 **ASSESSMENT OF THE DATASETS FROM THE INITIAL ANALYSIS STAGE**

Mission statements were identified in under half of the institutional websites searched (museums 39%, libraries 35%, archives 45%). Details of the samples and response rates are included in Appendix 5.3. The data gathered were divided as shown in Table 5.3. Table 5.6 below shows the Wordle clouds created from the raw datasets with only proper nouns removed:

[55] *Inputs* (resources, policies, standards) undergo *transformation* (curation, operational processes) producing *outputs* (products and services for users).
[56] Oxford Dictionaries Online. "…*a similarity of characteristics suggesting a relationship, especially a resemblance in structure between animals, plants, or languages: a semantic affinity between two words"*. Available at: http://oxforddictionaries.com/definition/english/affinity?q=affinity [accessed 15th August 2013]

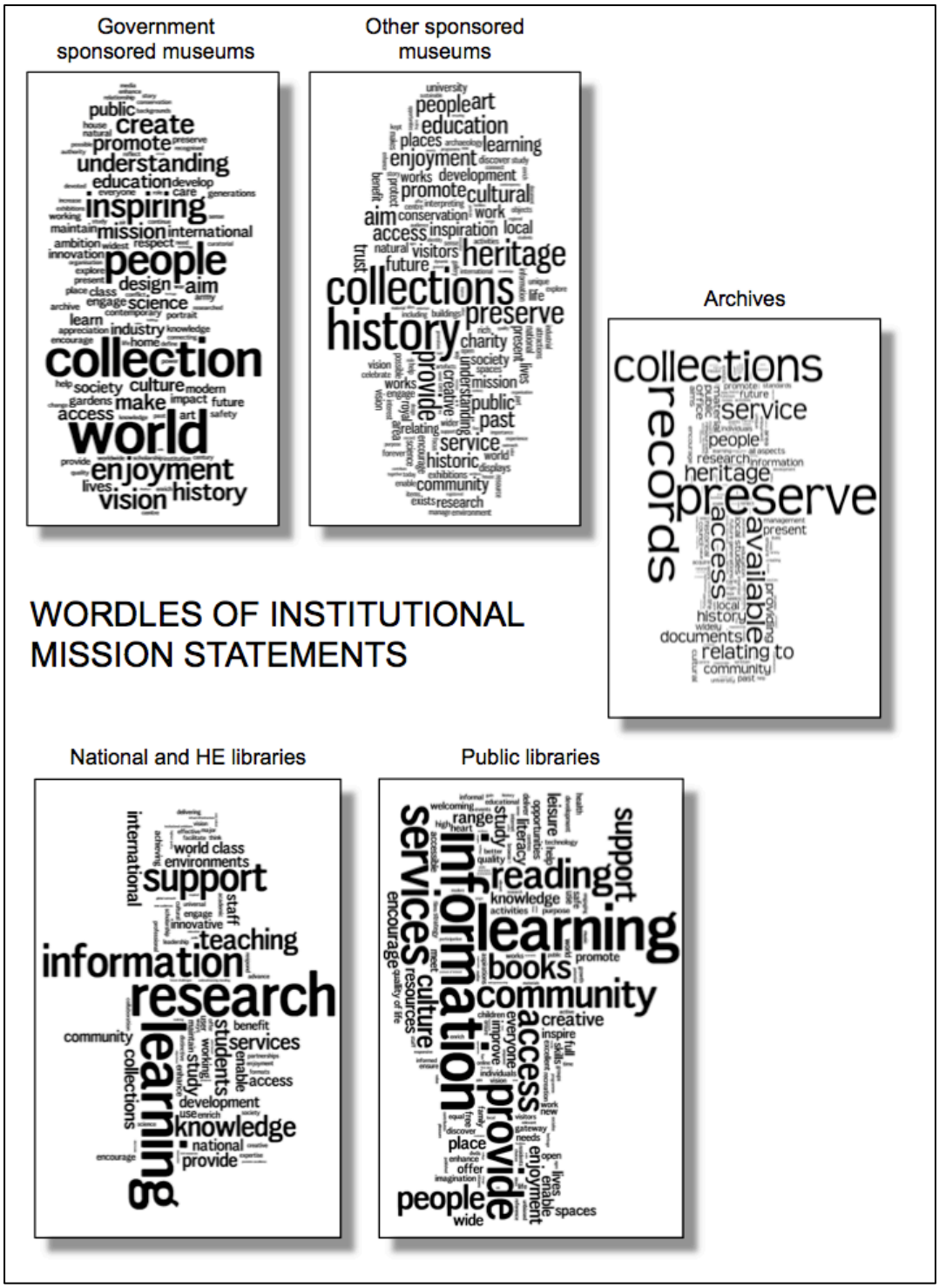

Table 5.6 *Mission Statement Survey Wordle clouds*

The Wordle software uses only the top 150 for each display while the overall word list before further editing was close to 15,000. Presenting the word clouds at an early stage and at this size is useful to demonstrate Wordle's value. It is quite evident what are the significant words – they are the words that are readable. All the words that appear like mist behind, while they may be significant to later analysis, serve to highlight several important similarities and differences from the visible text of Table 5.6.

- The word *collection(s)*, most frequent for Other Sponsored Museums, second for Government Sponsored Museums and third for Archives is ranked ninth in the National and HE Libraries dataset and no mention for Public Libraries where the word *collections* fails to make an appearance. *Books* are, however, eighth on the Public Libraries list.
- *Preserve* holds the top spot for Archives while being at number four for Other Sponsored Museums. The word does not feature for Government Sponsored Museums or for any Libraries.
- *Heritage* and/or *history* are words that score high across Museums and Archives but not with Libraries.
- *Service(s)* is visible in Public Libraries (3rd most frequent), National and HE libraries (7th), Archives (6th) and Other Sponsored Museums (10th), but does not appear on the Government Sponsored Museums Wordle.
- *Learn(ing)* holds the top spot for both Library datasets while being down at 16th for Other Sponsored Museums and 22nd for Government Sponsored Museums.
- *Information* and *knowledge* are both clearly visible in the Library datasets, but do not appear in the two Museum datasets and for Archives *information* sits in 18th place.
- The word *community* is visible on all datasets apart from the Government Sponsored Museums, where, along with National and HE Libraries, words such as *world*, *world class* and *international* possibly reflect the broader roles of those institutions.
- Finally of note, the word *research* ranks 2nd for the National and HE Libraries, but makes no appearance elsewhere.

These points illuminate the ways in which it is possible to make comparisons between different datasets. It is evident that there are different vocabularies in use. For example, in both museums datasets the word *education* ranks higher in the frequency list than *learn(ing)* (bullet five above). The key question to be answered is the extent to which these mission statements are telling similar stories, but with different voices. Closer understanding of these comparisons called for more manageable (i.e. smaller) datasets of the highest frequency words to support practical evaluation through categorisation.

5.3.2 DATASET REFINEMENT

The majority of the mission statement datasets had extremely 'long tails' of words used only once or twice[57]. The top 50 words in each case were chosen as a manageable amount for synthesis and categorisation. See Table 5.7:

[57] For example, the Non-Sponsored Museums category required editing from almost 6,500 words down to 350. After removing stop words and synonyms it still required removal of almost every one of the 570 words cited only once.

MUSEUMS		LIBRARIES		ARCHIVES
GOVT SPON'D	OTHER SPON	PUBLIC	NAT/HE	
world:19	collections:62	learning:44	learning:19	preserve:65
collection:17	history:57	information:43	research:19	records:65
people:14	heritage:45	services:35	information:14	collections:57
inspiring:11	preserve:40	provide:33	support:13	available:39
enjoyment:10	provide:36	community:28	knowledge:9	access:36
create:9	aim:32	reading:28	teaching:9	service:33
vision:9	education:31	access:26	services:7	heritage:30
history:8	art:30	books:24	students:7	relating~to:26
understanding:8	cultural:30	people:23	collections:6	people:23
aim:7	service:30	support:22	international:6	documents:20
make:7	enjoyment:29	culture:19	provide:6	history:20
mission:7	past:29	creative:13	study:6	community:17
promote:7	people:29	encourage:13	access:5	providing:17
access:6	access:28	enjoyment:13	community:5	research:17
culture:6	promote:27	study:13	development:5	local:15
design:6	learning:26	leisure:12	enable:5	office:15
education:6	future:25	place:12	environments:5	present:15
public:6	historic:25	range:12	national:5	information:14
science:6	charity:24	resources:12	staff:5	public:14
industry:5	public:24	enable:11	world~class:5	future:12
international:5	community:23	everyone:11	benefit:4	local~studies:12
learn:5	places:23	knowledge:11	innovative:4	material:12

Table 5.7 *Top 25 word frequencies from Mission Statement Survey*

For brevity Table 5.7 shows the top 25 words, however the full list is provided in Appendix 5.9. The next step in dataset refinement was to test the feasibility of integrating the two datasets for museums and the two datasets for libraries into one for each sector. There cannot be a fully objective test of feasibility, but a review demonstrated that between 34% and 48% of the 50 words in libraries and in museums datasets were synonymous, almost all of them the most frequently cited. While the process of aggregation produced three wordlists of uneven length, again the top 50 from each set were selected for further analysis. The resulting Wordle word clouds from these lists are in Table 5.8.

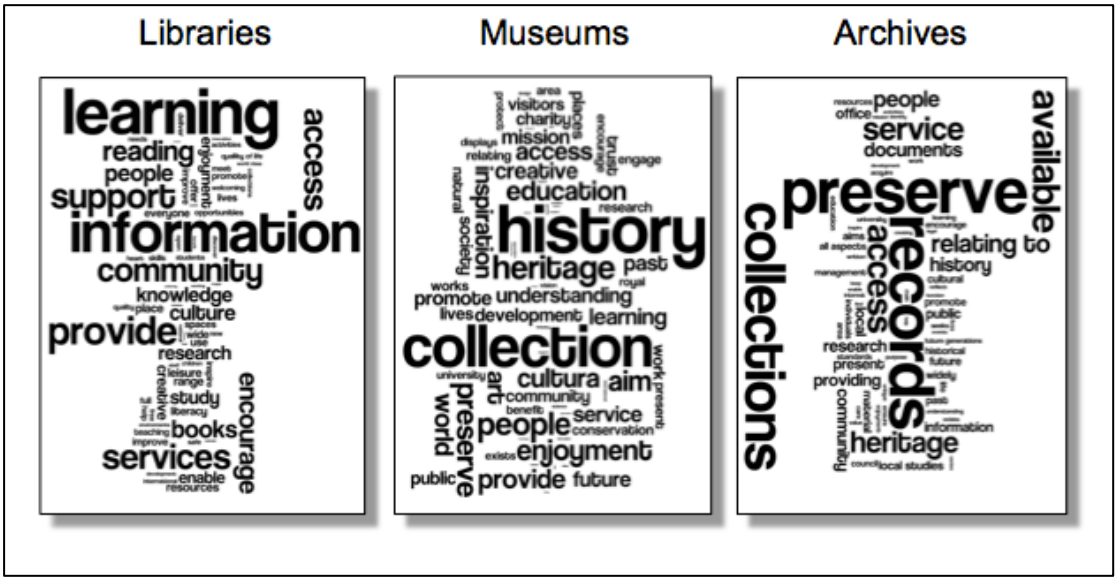

Table 5.8 *Aggregated Mission Statement text as Wordles*

These Wordles provide a simplified picture of similarities and differences across the three sectors. Some changes have taken place in priorities within the aggregated datasets due to the different scales of data between national and non-national museums and public and academic and national libraries but, as might be expected if there is a shared vocabulary, a number of the most frequent words appear in both datasets for museums, and similarly for libraries. To test further these commonalities, the next stage, of word tagging, was applied initially separately to each of the five 50 word datasets for further comparison.

5.3.3 DATA TAGGING AND MAPPING

The categorisation of each of the top 50 word lists of the five mission statement datasets was based on the Open Systems Transformation Model (Table 5.4):

- Collection curation;
- Collection scope/range;
- Boundary exchange, service presentation;
- Boundary exchange, use/effect;
- Other (words not directly associated with the first four categories).

Many of the words contain their own sense of meaning and could readily be placed in the appropriate category. Words such as *collection, preserve, promote* and *inspiration* could be quickly assigned. However, there were other words – *life, make, full,* for example – all requiring contextual qualification before they could be successfully assigned. For all words where there was any uncertainty, a word search was done on the original source text to establish the context(s) in which the word was used. Contextual issues will always be a challenge in word analysis, but placing a reasonable limit on the number of words in synthesised datasets made rechecking against source text practicable. Table 5.9 shows graphically the frequency distributions for the five mission statement datasets:

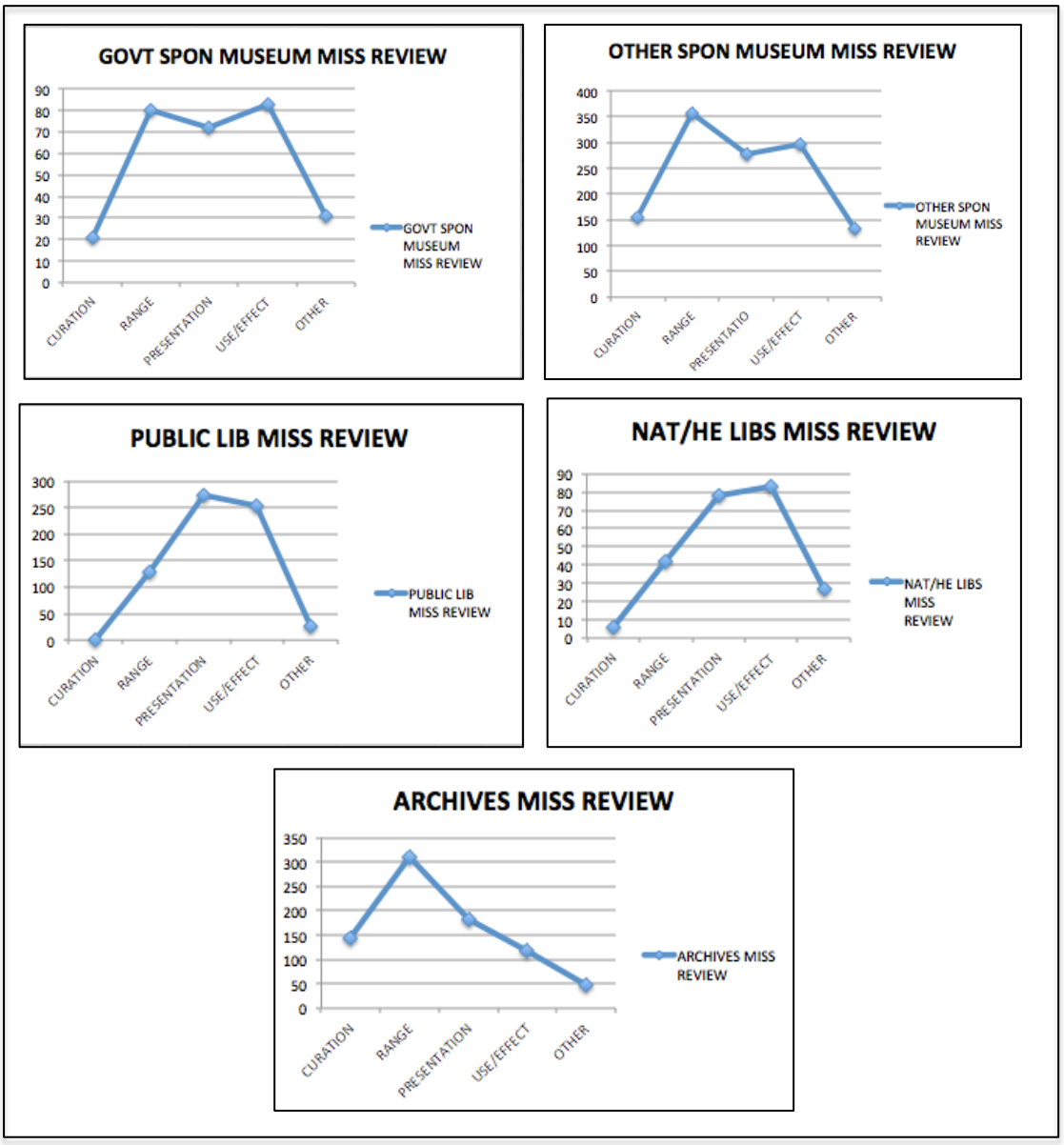

Table 5.9 *Graphs of distributions of the top 50 Mission Statement words*

The full details of this analysis process are presented in Appendices 5.9 and 5.10. The curves in these graphs highlight both similarities and differences. The most obvious similarity is that the majority of the words sit in the categories associated with the scope of collections and their presentation and use. Overall, institutions have recognised that overemphasis on internal processes would not be the route to a successful mission statement. Table 5.10 demonstrates this point through the percentage distribution of ranking points across the five categories:

	COLLECTION		BOUNDARY EXCHANGE		OTHER
	Curation	Collection	Presentation	Use/effect	
GOVT SP MUSEUMS	7	28	25	29	11
OTHER SP MUSEUMS	13	29	23	24	11
PUBLIC LIBRARIES	0	19	40	37	4
NAT & HE LIBRARIES	3	18	33	35	11
ARCHIVES	18	39	23	15	6

Table 5.10 *Percentage distribution across categories (Appendix 5.10)*

The *other* category contains several words that 'slipped through' the word analysis stage; *mission, vision* and *aim* were in most cases already removed as irrelevant to the process of analysis. That category contains just one word of direct interest. *Innovative* will be returned to in Chapter Thirteen when an assessment is made of the extent to which it is possible to match practitioner norms and values with their readiness potential for change. Despite unsurprising convergence around the collection, presentation and use categories, there was a distinct difference between the archives' distribution of those categories and those of museums and libraries. Taking the percentage distributions of Table 5.10 and the two sets for museums and libraries for each institutional form, provides a comparison of this against a common benchmark:

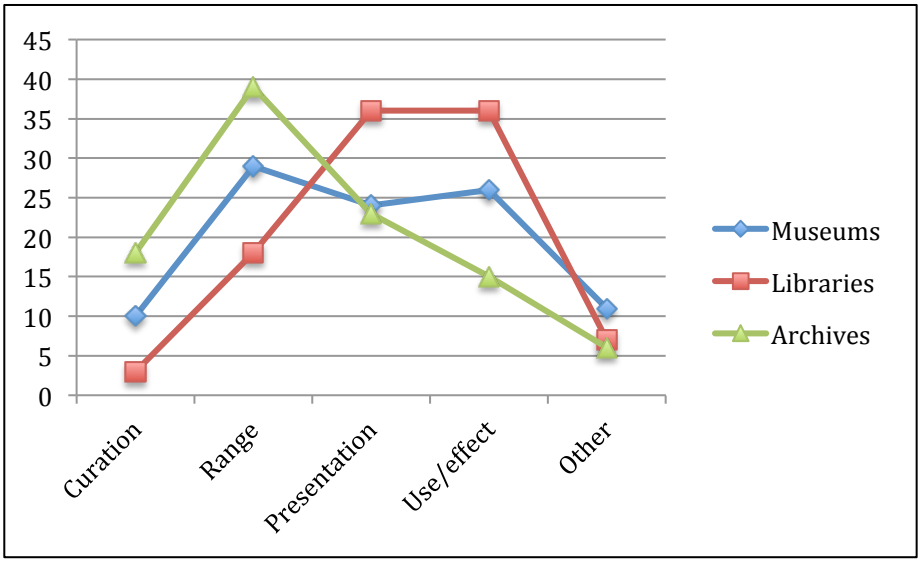

Table 5.11 *Graph of aggregated distribution*

The graph highlights a clear key difference between the priorities of libraries and those of museums and archives. In the words used to describe their mission and purpose both archives and museums place more emphasis on collection-related activities than do libraries. Table 5.12 shows these data summarised in the three top-level categories:

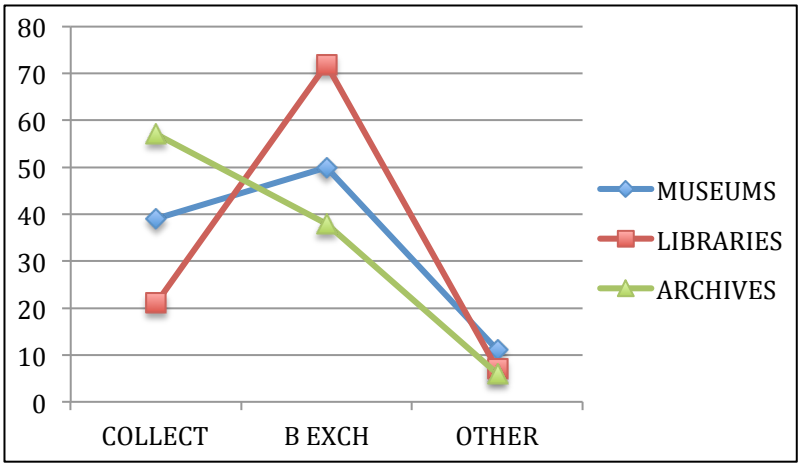

Table 5.12 *Mission Statement data aggregated into three top-level categories (Collection, Boundary Exchange, Other)*

Museums and archives have traditionally collected often-unique artifacts with individual intrinsic value, whereas libraries have mainly collected commodity items where the value comes from use, rather than use and long-term preservation. In the case of libraries the language associated with the boundary exchange is of higher priority. Museums, while lower than libraries, still place the boundary exchange higher than collections in the language they use. Overall the archives curve is markedly different. Archives place less emphasis on describing *use/effect* (outcomes). Archival collections have tended to be the domain of the specialist researcher rather than the general user, with the result that the care of the collection rather than emphasis on its promotion and effect has been the most significant driver. Until recent years use patterns focused on in-depth research by the specialist. With the popularisation of genealogical services such as Ancestry[58] and The National Archives' development of online services[59] this emphasis may change.

5.3.4 SUMMARY

The Mission Statement Survey provided a platform to examine practitioner perspectives on the purpose and the processes necessary to achieve that purpose, together describing similarities and differences across collecting institutions from which to build a typology of categories to compare different institutional types. The aggregation of differing forms of museums and libraries was tested and justified and the categorisation and comparison of the distribution of words allowed mapping the use of differing vocabularies. That mapping demonstrated that within each of the institution types there is much convergence around shared vocabularies and common meaning in terms of mission and purpose. Finally, the reasons why in the survey of 966 websites 60% of the searches failed to locate any mission/purpose statement is a matter that will be returned to in Part Three.

[58] Ancestry website. Available at. http://www.ancestry.co.uk/ [accessed 24th August 2013]
[59] The National Archives. Available at: http://www.nationalarchives.gov.uk/records/start-here.htm [accessed 25th August 2013]

- Only around 40% of collecting institutions surveyed provided a public statement of mission on their website
- Within each of the institutional forms there are shared vocabularies and broadly common priorities in their mission statements.
- Archives place greater emphasis on the collection rather than how it is presented, used and the value delivered

Table 5.13 *Summary conclusions from Mission Statement Survey*

5.4 DOCUMENTARY REVIEW

The purpose and the scope of the Documentary Review was to provide four different perspectives on process and purpose:

- Dictionaries and Wikipedia definitions;
- Definitions prepared by professional agencies (UK and selected other agencies);
- Recent policy guidance documents from governments (Home Nations);
- Standards and accreditation schemes (UK-wide, Home Nations).

Consideration of the datasets arising from the Documentary Review follows the approach outlined in Section 5.2 and detailed in Appendix 5.2. First, the evidence revealed by the 12 separate datasets is summarised; second, arising from the review of the datasets a process of refinement is presented, and finally the tagging and mapping is described.

5.4.1 ASSESSMENT OF THE DATASETS FROM THE INITIAL ANALYSIS STAGE

The three sets of four Wordles derived from the first stage of the Documentary Review are presented in the tables below, along with a brief commentary. The range of resources used to derive these Wordles and the word lists from which they were derived was described in Sections 5.2.2 and 5.2.3 of this chapter and full details of the actual sources used is detailed in Appendices 5.11 - 5.22. The richness of the datasets cannot, of course, be demonstrated at the small scale used in Tables 5.14-16 below. However, as noted in the presentation of the Mission Statement Wordles, there is advantage in this scale since it highlights both the most significant words very clearly while at the same time giving a strong sense of the balance between those frequently recurring words and the ‘mist’ that forms the background of five of the six in all three sectoral datasets.

i) **MUSEUMS**:

Table 5.14 *Documentary definitions of museums*

The following comments may be drawn from the Wordle clouds:

- The word *collection(s)* appears in all but the Dictionary Definition Wordle, although that dataset places emphasis on the collection and its scope, through a different vocabulary e.g. *objects, conserves, preserves, scientific, artistic.* Similarly *history*, *heritage* and *historical* appear in three of the word clouds
- Reference is made to downstream purposes through words such as *people, public, users, education and learning* in one form or another in all of the word clouds.
- These priorities show similarities with the museums mission statement Wordle in Table 5.8, a fact that will be returned to later.
- It is possible to identify different emphasis between the Standards Wordle and the other three. Words and phrases such as *management, governing body, forward plan, policy, effective, functions, formal arrangements, statement of purpose* all reflect focus on the operational processes of the institution. This highlights Standards priorities on organisational sustainability alongside the need for effective collections and services.

ii) **LIBRARIES:**

Table 5.15 *Documentary definitions of libraries*

Comments on the libraries word clouds:

- Like the museums datasets, Table 5.15 echoes the significant words in the libraries' Mission Statement Wordle in Table 5.8. *Learning, service(s), community(ies) and information* appear multiple times.
- The tangible products of collections – *books, films, records, periodicals* – are visible in the Dictionary word cloud, but are less so in the others with *books* only appearing in UK Policy and UK Standards.
- The more intangible concepts such as *community, access, public* and *services* have greater visibility, being only absent from the Dictionary definitions, reflecting a broad consensus in different library types across the whole of the UK.

iii) **ARCHIVES**:

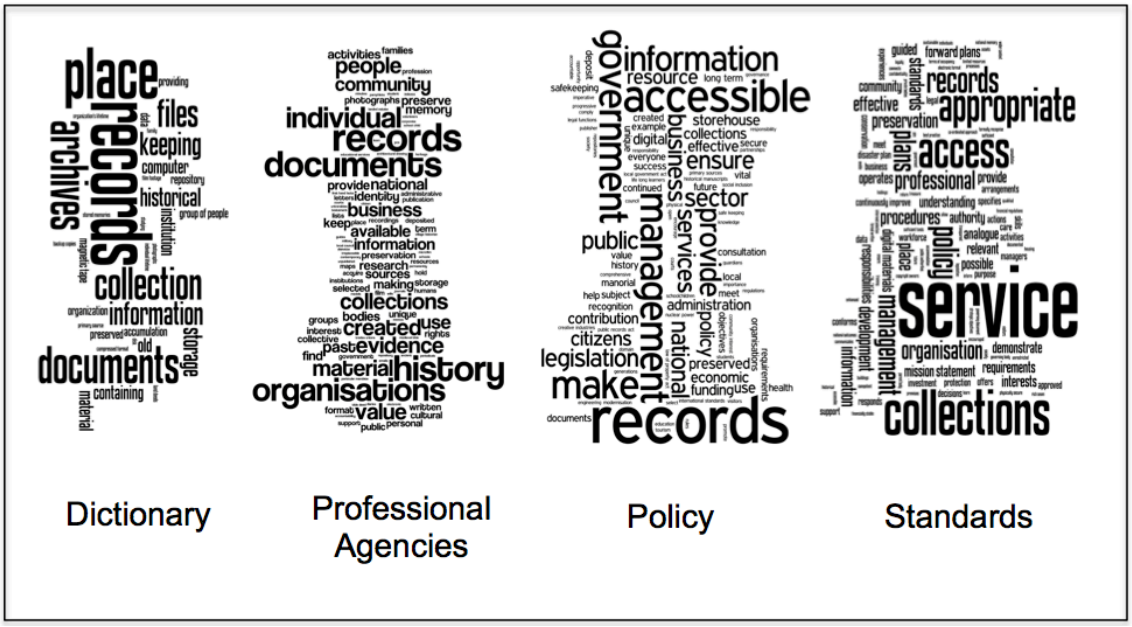

Table 5.16 *Documentary definitions of archives*

Comments on the archives word clouds:

- In similar vein to the museums Wordles, collections related words form the majority of words that are visible. *Records* is high in all the datasets followed by *documents* and *collection(s).*
- Again like museums, the Standards related dataset contains more words related to management and service accountability than is the case with the other archives datasets.
- Both the Policy and Standards datasets include more words associated with use/effect – words such as *accessible, service, public, provide, access* and *appropriate* - than in the Mission Statement Survey. This is due at least, in part, to the recent changes in England and Wales resulting with strategic responsibility for archives being placed under the control of The National Archives, an agency that has demonstrated a commitment to increasing the co-operation across public archives and raising standards of curation and service to users (Kingsley, 2012).

This introduction to the Documentary Review datasets is intended to provide a snapshot of the range of evidence covered and to highlight some obvious similarities and differences. The next stage, dataset refinement, provides a step towards evidence that justifies comparative analysis.

5.4.2 DATASET REFINEMENT

One of the key outcomes of this research is to develop a Shared Mission Statement relevant to all institutions, as an important step towards greater strategic convergence in the digital space. To ensure consistency of approach across all of the textual analysis the manipulation of the Documentary Review datasets therefore follows the techniques applied to the Mission Statement Survey.

The first stage of refinement was the production of a list of the top 50 words for each of the datasets. For brevity here, the top 25 in each category are presented just as in the Mission Statement Survey. Full details of the refinement process are in Appendix 5.23:

MUSEUMS			
DICTIONARY	PROF AGENCY	POLICY	STANDARDS
objects:8	heritage:10	collections:20	collections:27
artistic:6	national:9	develop:14	appropriate:11
historical:6	collections:8	learning:13	users:11
scientific:6	institution:8	culture:9	effective:10
building:4	public:6	sustain:9	plan:10
place:4	art:5	people:8	policy:10
study:4	exhibit:5	diverse:7	information:9
exhibit:3	natural:5	inspiration:7	emergency:8
institution:3	access:4	workforce:7	access:7
interest:3	contribute:4	increase:6	documentation:7
care:2	interpreting:4	promote:6	forward~plan:7
conserves:2	not-for-profit: 4	skills:6	provide:7
cultural:2	preserve:4	encourage:5	environment:6
display:2	communities:3	enjoyment:5	governing~body:6
preserved:2	cultural:3	provide:5	guided:6
public:2	educate:3	role:5	approved:5
value:2	enjoyment:3	share:5	conservation:5
acquisition:1	establishments:3	contribute:4	develop:5
artefacts:1	identity:3	delivery:4	management:5
available:1	intangible~heritage:3	educate:4	responsibilities:5
collection:1	objects:3	effective:4	statement~of~purpose:5
educational~interpretation:1	people:3	experience:4	workforce:5
importance:1	permanent:3	high~quality:4	care:4
kept:1	research:3	range:4	learning:4
lasting~interest:1	service:3	services:4	long~term:4

Table 5.17 *Top 25 words from museums Documentary Review*

LIBRARIES			
DICTIONARY	PROF AGENCY	POLICY	STANDARDS
collection:12	information:40	services:39	service:19
books:10	community:33	local:28	staff:11
room:9	services:26	community:27	use:11
films:7	public:18	provide:27	public:10
reference:6	accessible:17	access:20	provide:8
borrowing:5	supporting:15	public:16	suitable:8
building:5	reading:13	books:15	access:7
kept:5	local:12	information:15	learning:7
literary~materials:4	helping:10	people:15	school:7
periodicals:4	offer:10	deliver:12	communities:6
reading:4	online:10	activities:11	materials:6
institution:3	knowledge:9	authorities:11	books:5
lending:3	people:9	cultural:11	stock:5
materials:3	development:8	develop:11	appropriate:4
organization:3	free:8	free:11	range:4
recorded:3	professionals:8	including:11	reading:4
records:3	resources:8	offer:11	students:4
videos:3	books:7	needs:10	activities:3
accessible:2	cultural:7	details:9	areas:3
artistic:2	education:7	help:9	fulltime:3
cds:2	literacy:7	materials:9	information:3
databases:2	creative:6	opportunities:9	meet:3
manuscripts:2	digital:6	range:9	policy:3
music:2	government:6	reading:9	promotion:3
newspapers:2	health:6	government:8	pupils:3

Table 5.18 *Top 25 words from libraries Documentary Review*

ARCHIVES			
DICTIONARY	PROF AGENCY	POLICY	STANDARDS
records:13	records:12	records:13	service:19
place:11	documents:11	accessible:9	collections:12
archives:8	history:11	government:8	access:11
documents:8	organisations:10	make:8	appropriate:9
collection:7	individual:9	management:8	policy:7
files:6	collections:7	information:7	records:7
information:5	created:7	provide:6	management:6
keeping:5	evidence:7	business:5	plans:6
historical:4	material:7	ensure:5	information:5
storage:4	people:7	legislation:5	organisation:5
computer:3	value:7	national:5	professional:5
containing:3	business:6	public:5	development:4
institution:3	community:6	sector:5	effective:4
material:3	use:6	services:5	place:4
old:3	available:5	citizens:4	preservation:4
organization:3	information:5	policy:4	procedures:4
accumulation:2	national:5	resource:4	standards:4
data:2	past:5	administration:3	analogue:3
group~of~people:2	activities:4	collections:3	authority:3
magnetic~tape:2	bodies:4	contribution:3	community:3
preserved:2	find:4	digital:3	demonstrate:3
providing:2	identity:4	economic:3	digital~materials:3
repository:2	keep:4	effective:3	forward~plans:3
backup~copies:1	making:4	funding:3	guided:3
compressed~format:1	memory:4	preserved:3	interests:3

Table 5.19 *Top 25 words from archives Documentary Review*

5.4.3 DATA TAGGING AND MAPPING

Tagging and mapping the documentary evidence involved assigning each of the top 50 words to one of the five categories used in the Mission Statement Survey:

- Collection curation;
- Collection scope/range;
- Boundary exchange, service presentation;
- Boundary exchange, use/effect;
- Other (words not directly associated with the first four categories).

The process of category assignment, detailed in Appendices 5.24 – 5.26, produced 12 representations of the word distributions, four for each institution type. Below those data representations are aggregated in three graphs demonstrating the similarities and differences across the four datasets for each institution. It is important when reading these graphs to recall that the Documentary Review datasets, unlike those of the Mission Statement Survey, come from four different sources and understanding the different perspectives is an important part of their interpretation:

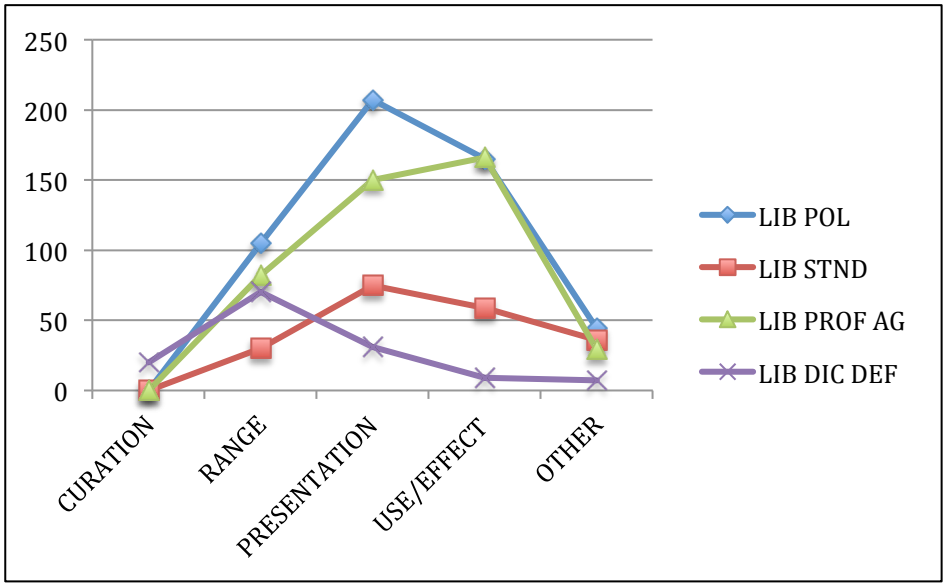

Table 5.20
Libraries: graph of frequency of tagged words

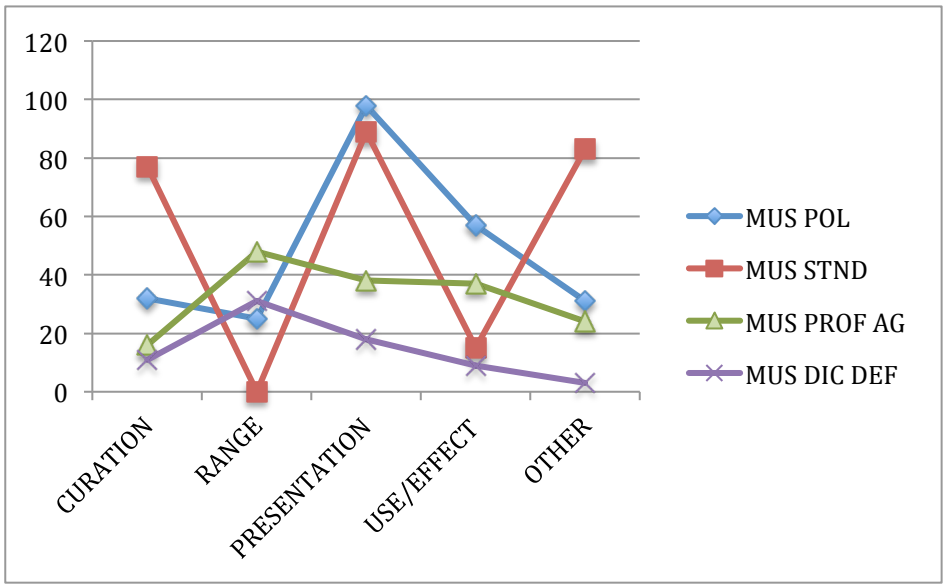

Table 5.21
Museums: graph of frequency of tagged words

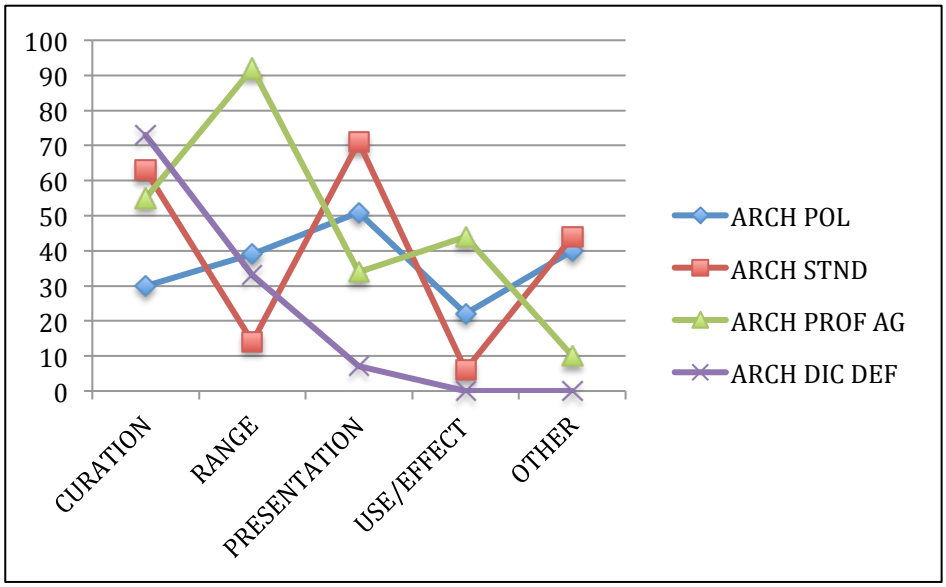

Table 5.22
Archives: graph of frequency of tagged words

These three graphs do not provide any immediately obvious patterns of collecting institution priorities, but do highlight different perspectives:

- **Dictionary definitions:** these datasets have the lower word counts since by their nature dictionary entries tend to be short and concise[60]. The three curves show some consistency in emphasis on the collection rather than the exchanges that take place and their effect. In the case of the archives' definition there is greater frequency of terms describing the process of Curation than is the case for libraries and museums. The inclusion of these generic definitions made it possible to investigate whether there might be differences between the 'generalist perspective' and those of policymakers and practitioners. All three curves do indeed show similar variation from the other three datasets, underlining the non-specialist perception of the institutions primarily as collections of things.
- **Other libraries datasets:** While the three curves show different levels of frequencies they all reflect a bias towards the boundary exchange categories of Presentation and Use/effect. Given that the dataset size for this synthesis process was a maximum of 50 words, in the three graphs high frequencies demonstrate convergence around common words. Of the 207 citations of the 17 words in the Libraries Policy dataset tagged as Presentation, just over 50% were cited 11 or more times. The top three words with the Presentation tag – *services, provide, access* – represented 42% of the category's frequency total[61]. Conversely, the almost total absence of vocabulary that references the Curation of collections in all four datasets underlines convergence around a shared language across the documentary evidence for libraries. Overall the libraries datasets demonstrate similar patterns of distribution suggesting a shared set of norms and values.
- **Other museums datasets:** At first inspection the three datasets do not reflect any of the shared priorities that are seen in the libraries graph. The most obvious variation is the dramatic curve defined by the Museums Standards dataset where there is nothing in Range and Use/effect has but 15 citations; a mere 6% of the 264 total citations in the dataset. To understand the Standards 'W' curve some additional information is required. Within the UK there is a single museums standards scheme currently co-ordinated by Arts Council England in collaboration with three other Home Nations (Arts Council England, 2011b). This scheme has been in operation since 1988 and is therefore established within the museums sector. Its primary focus is on the sustainability and robust management of institutions rather than placing primacy on the achievement of particular policy objectives. It is important since the scheme covers not just institutions

[60] For the Wikipedia definitions of museums, libraries and archives the initial introductory sentences were selected.
[61] It should also be noted that the frequency of word citation is also to an extent dependent on the extensiveness of the original source data, as noted above in the case of Dictionary data.

funded directly from the public purse, but also independent museums such as those run by large organisations such as the National Trust and English Heritage, and small local museums without broader institutional accountability. Thus, although the Curation of the collection is essential to long-term sustainability, its Range is a matter for the individual institution. While Presentation forms part of the care and exploitation of the collection, the Use/effect is of less significance within the scheme than good organisational practices such as *planning, policy* and *governance*, all of which top the frequencies of the Other category. The Professional Agency category presents a relatively even distribution across the five categories, while Policy emphasises boundary exchange activities.

- **Other archives datasets:** The most immediately apparent feature of the archives datasets is the Standards curve that is similar to the Standards data for museums. The same interpretation may be applied to these data as was described for museums – the development of a common standard for the sustainability and effective operation of archival collections by The National Archives, that has jurisdiction over strategic policy for public archival collections in England and Wales (The National Archives, 2013). This scheme clearly reflects the priorities of the Museums Accreditation Scheme – collections care, presentation and effective organisational management. The other significant feature of the datasets is the peak in the Range category for professional agencies in comparison with the two other graphs. This category contains both descriptions of media types and the types of organisations that might be represented within archival collections.

The final stage of the Mission Statement Survey was the production of several graphs showing the aggregated datasets into one each for museums, libraries and archives. That stage is not relevant to the Documentary Review since the four datasets for each institution type represent different perspectives. Nevertheless, it is illuminating to apply the final stage of the Mission Statement Survey – aggregating the five categories into three – to show the distribution of words under the more generic headings of Collection and Boundary Exchange. The datasets presented below are represented as percentage ratios rather than numeric quantities (details in Appendices 5.27 and 5.28):

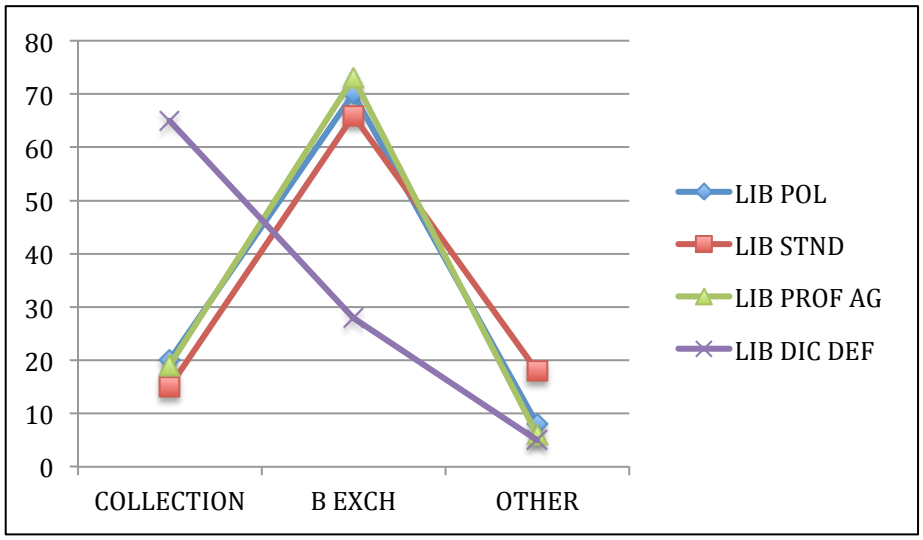

Table 5.23
Libraries graph
(3 categories)

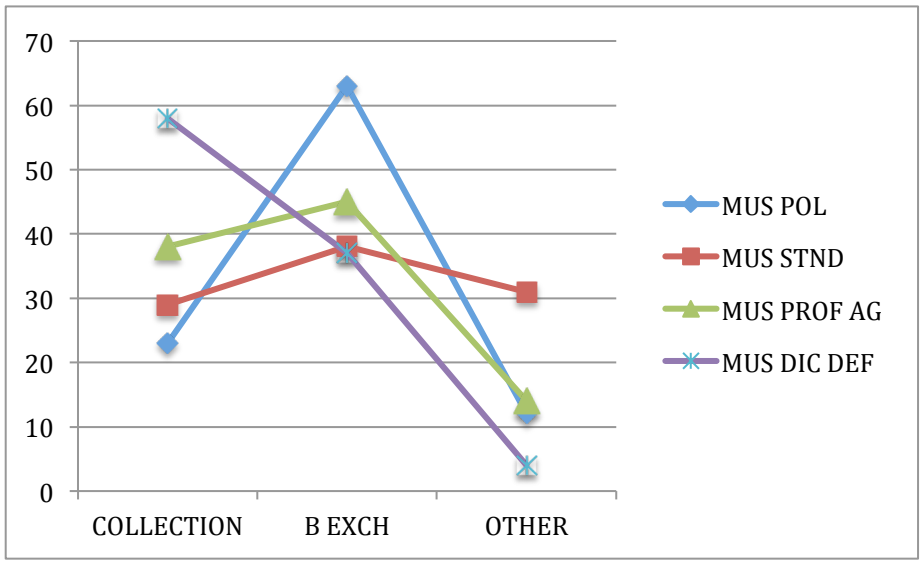

Table 5.24
Museums graph
(3 categories)

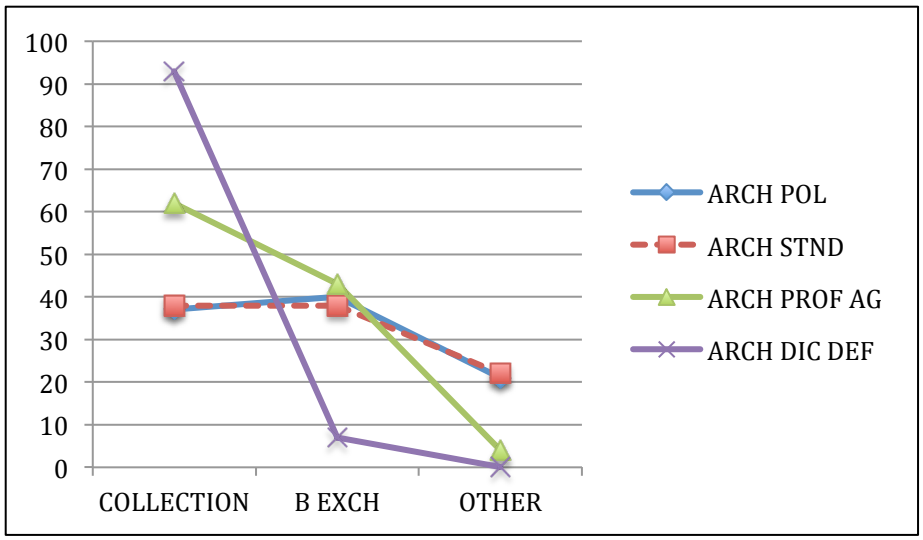

Table 5.25
Archives graph
(3 categories)

Note the Archive Standards dataset is shown as a dashed line to make it clear that a fourth dataset – Archives Policy – is actually displayed. The two distributions are almost identical. With the aggregated representation in Tables 5.23-25 patterns not previously apparent are revealed. By using percentage distributions rather than absolute values both museums and libraries datasets (Policy, Standards, Professional Agencies) show similar curves, both with the highest frequencies associated with activities addressing the boundary exchange. The archives still show a different set of priorities with the greatest emphasis on the collection, in contrast to both museums and libraries. Archives Policy and Standards datasets show almost identical distributions. Of further note is the fact that in this revised form of presentation, the dramatic 'switchback' that forms the Standards curve for museums and archives has been smoothed to show, if not completely comparable shapes, something that is more comparable to the Mission Statement Survey data in Table 5.12.

5.4.4 SUMMARY

The process of analysing and synthesising the data from the Documentary Review produced both similarities and differences within institutional forms and across all institutions, making it possible to describe a range of common themes across the individual sectors and some similarities at a meta-level across the sectors together (Table 5.26):

- Across collecting institutions there are differences in the priority given to curatorial functions, libraries being at the lower end and archives at the higher end;
- The significance of *presentation* of the collection to all institutions
- The lower priority placed by archives on use/effect
- If the dictionary definitions are discounted from the datasets, the patterns of data shown in the Documentary Review are similar to those of the Mission Statement Survey
- National standards schemes for museums and archives set different priorities from the professional agency and policy datasets
- The fact that the dictionary definitions reflect a very different perspective to the other datasets raises the question of how much of a gap there might be between the perceptions of what is a museum, library or archive in the mind of the practitioner and in the mind of the citizen

Table 5.26 *Summary conclusions from the Documentary Review*

The underlying processes of analysis and synthesis followed the pattern applied to the Mission Statement Survey, with some small modifications to accommodate the wider range of sources and agents involved. Section 5.6 will consider the common themes across the two separate sets of analyses and further interpretation will be undertaken in the synthesis of Part Three.

5.5 EVIDENCE OF INNOVATIVE PRACTICE

To contribute to an understanding of the readiness of practitioners and policymakers to innovate using digital tools the final element of this textual analysis used the data to identify references to the Internet and to innovation. The datasets have the potential to throw light onto the degree to which innovation generally and digital developments particularly are of importance. To explore this aspect of the data fifteen word stem terms were chosen, plus the stem 'innovat' and all were searched across the aggregated raw text of the two datasets,. Table 5.27 below details the hits against each of the terms:

SEARCH TERM STEMS	MISSION STATEMENTS			DOCUMENTARY REVIEW		
	Museums	Libraries	Archives	Museums	Libraries	Archives
3D						
Comput		1			3	
Cyber		1				
Digit		2	3	1	10	7
Electronic		4			2	3
ICT		2			4	
Immers						
Internet		5			7	
Mobile						
Network (digital)		2	1			
Online		5			17	
Smart						
Technolog		7		2	1	
Web	2		1		2	
Wifi		1				
Innovat	9	8		4	5	
TOTAL	11	38	5	7	51	10

Table 5.27 *Frequency of use of terms relating to the use and development of the Internet (Appendix 5.29)*

There are two points immediately apparent from Table 5.27. First, there are many more mentions of the word stems within the libraries' datasets than museums and archives and second, overall the number of citations is low compared with the high-scoring words (see Table 5.7 by way of frequency comparison) and overall an extremely small percentage of the 26,000 words searched. Care must be taken in interpretation. The higher frequencies within libraries are likely to have resulted from the major role of the Internet as access route to information and knowledge in libraries over a number of years. UK wide, public libraries had major capital investment in ICT infrastructure at the turn of the Millennium to support social and technical innovation (Brophy, 2004) while university and other libraries depend on digital technologies to provide access to the wide range of resources now readily available online – online journals and

databases[62]. The lower citation frequency of cited words in museum and archive mission statements might be explained by the nature of the statement itself, since the purpose is to focus on outcomes rather than means. However, it is a matter of concern that the development of the Internet features so little in the Documentary Review, given that policy documents should, presumably, be giving guidance about future trends and possibilities for service innovation.

5.6 CHAPTER SUMMARY AND OUTCOMES

Through data analysis, refinement and synthesis of the Mission Statement Survey and the Documentary Review, Chapter Five set out to provide evidence in support of Research Objectives Four and Five by addressing the three questions presented towards the end of section 5.1:

- Is there evidence to support the creation of a Shared Mission Statement that embraces all institutional types, with justification based on the data analysed?
- How effectively do service managers present their services and institutional missions to their audiences now and what should they do in the future?
- How is purpose defined within policy guidance and advice on best practice provided by professional agencies?

A brief summary of the outcomes of the research is set out below, which will be returned to in the synthesis processes of Chapter Thirteen. Outcomes of question one:

i) VOCABULARIES.

Mission Statement Survey. Within the three individual institutional categories there is evidence of the use of shared vocabularies across a wide range of mission statements. *Collections* is a word used frequently by museums and archives, while much less so for libraries where reference to the more intangible content of their collections – *information* and *knowledge* – have higher frequencies. *Service* and *learning* score highly for libraries while references to *heritage* and *history* are high on the lists for museums and archives. Various forms of the word c*ommunity* appear across all three categories of institution.

Documentary Review. This review drew evidence from a range of different sources representing a more diverse constituency than the mission statements that generally reflected the voice of the practitioner. Documentary sources included government departments and strategic agencies, professional agencies and leading national institutions. Setting aside the dictionary definitions that describe in non-specialist terms the functions of museums, libraries and archives, the remaining datasets resonate well with the words used in the Mission Statement Survey both in terms of the patterns and frequencies of words. For museums and archives where there are national standards schemes in existence there was a stronger emphasis on words associated with effective service management and sustainability, but across

[62] Jisc Collections for example. Available at: http://www.jisc-collections.ac.uk/Catalogue/ [accessed 13th December 2013]

all three clusters of datasets there were recognisable patterns that align with the language used in the Mission Statement Survey.

ii) **SIMILAR STORIES WITH DIFFERENT VOICES**.

The second component of the analysis was an examination of the extent to which it might be possible to aggregate datasets within institutional types and, at a more holistic level, to explore whether mapping words into common categories would provide useful patterns that might show common themes. An attempt to establish whether meaning was shared despite different word usage. For both the Mission Statement and the Documentary datasets, the use of a tagging typology and subsequent mapping into graphical form demonstrated similarities across institutional types. Further consideration of the relationships between the three sets of data in Table 5.12 and of similar relationships in Table 5.23-5.25 is addressed in Part Three. Here the point must be made that while there are obvious differences in priority within both sets of data, there are also similar patterns, around collection presentation and the way in which it is possible to link the texts to the histories and the traditional roles of the institutions. Archives and museums have focused on the curation of often unique objects within collections while libraries just as often have managed expendable collections of commodities where turnover and renewal may be a priority.

Outcome of second question: the sample survey of mission statements returned a low hit rate in regard of publicly available statements; with an overall average of 40% and many of those found required a significant degree of mining to locate them. If the sample is typical of the wider constituency, it suggests that practitioners generally do not place a high priority on making explicit their mission and purpose to users and potential users.

The third question, concerning policy guidance, formed part of the Documentary Review where the data available in some categories was at best partial. Standards is a good example, where two sectors have comprehensive schemes and one has such schemes in only two of the home nations. Further, brevity and style play their part in the formulation of the resources found so that frequencies of citations vary across the five tagged datasets in each of the sectors. Nevertheless, the primary purpose of undertaking this portfolio of resources for analysis was to highlight the gaps as well as the text found and to undertake analysis that was not in any way a celebration of numbers, but the distribution of words within defined datasets and surface those words that were most frequently used, in the context of the particular dataset. These issues are addressed further in the holistic reviews of strategic documents of Chapters Eight, Nine and Ten.

Overall the simple tagging scheme was able to accommodate the overwhelming majority of words included in the datasets within the two categories of Collection and Boundary Exchange. This is clear from the fact that almost 90% of the words analysed could be related to those categories and the sub-categories.

The outcomes of these analyses may hold few surprises for the practitioner, but they do provide reinforcement for the key roles of collections care and exploitation and show how consistent are

those roles across the whole of the collecting institution sector. The outcomes also highlighted differences to be investigated further. Such an interpretive analysis of this range of material has not previously been undertaken to gain insight into the norms, values and worldviews of those involved in directing and managing collecting institutions. The wider implications of the evidence from this chapter form an important element of the synthesis process of Part Three.

CHAPTER SIX
Literature Review: Organisational Structure, Policy and Power

6.1 CHAPTER PURPOSE

This component of the research is designed to contextualise and define what the Research Hypothesis describes as the Institutional Paradigm. It does this by examining the wider structures of the public sector and the position within those structures of collecting institutions. Historical context is considered to the extent of its relevance to the worldviews of practitioners and the frameworks within which collecting institutions have evolved. The chapter contributes to the scoping defined by Research Objectives Four and Five, particularly bullets one and two of Research Objective Four:

COLLECTING INSTITUTION ANALYSIS CHAPTERS THREE TO ELEVEN	
Objective	**Scope**
RESEARCH OBJECTIVE 4 Identify the form, components and priorities across collecting institutions that define and direct existing service propositions	• Examine organisational structures • Knowledge policy, wider policy, power structures, and clarity of service missions in relation to public policy • Values and norms as reflected in professional literature linked to institutional purpose and digital innovation
RESEARCH OBJECTIVE 5 Review examples of the development of digitally based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change	• Commitment and ability of institutions and practitioners to change their service worldviews in the face of external change • Examples of engagement with digital services • Review research on innovation and the diffusion of digital services provided by collecting institutions
METHODS: Textual analysis, literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 6.1 *Research Objectives Four and Five*

6.1.1 CHAPTER SCOPE AND STRUCTURE

Chapter Six contributes to the scoping defined by Research Objectives Four and Five, specifically bullets one and two of Research Objective Four. It seeks, through literature review, to describe and justify the concept of the Institutional Paradigm and to examine the fit and status of collecting institutions within the paradigm. The presentation of the chapter falls into two parts. First, the organisational landscape that collecting institutions inhabit is described, considering three overarching factors influencing all aspects of operation and development: structure, policy, power and innovation. The second part examines the evolution and current

operation of collecting institutions, drawing out common themes across the various organisational contexts and histories, providing contextualisation in the wider setting of the public sector.

The chapter focuses on structure, policy and power since, from the researcher's experience, these are the three components that have primary effect on the routine operation and strategic development of public institutions. The chapter will show that while at both local and national levels political agendas have influence, public sector organisations continue to operate almost exclusively within organisational policy and power structures in existence for most of the 20th century. Political priorities certainly influence institutional funding and, from time to time, seek wide-ranging organisational change, but as the review will demonstrate, overall political priorities have had only marginal effect on organisational or operational practices across the public sector.

6.1.2 DOCUMENT DISCOVERY

The approach to document discovery follows the process described in Chapter 3.3.2. For both parts of the chapter - the wider public sector and collecting institutions within the public sector context - the extraction of relevant documents from Mendeley and Zotero provides the means to follow further citations and also develop suitable search terms. These include public administration, public value, organisation theory, public administration, public sector innovation, change management, and for each of the three institutional forms, history, innovation, management, policy and advocacy. Close to 150 documents were traced on the wider public sector while for the second part, collecting institutions in the public sector, the figure was 210.

6.1.3 FILTERING AND SYNTHESIS

In similar vein to Chapter Four, this chapter's purpose is not to produce a *vade mecum,* a comprehensive handbook for public sector administration, or a complete history of museums, libraries and archives. Rather, the aim is to identify patterns of behaviours, constraints and opportunities common to the whole of the public sector that can be extracted from the literature and then to assess whether those patterns (the Institutional Paradigm) are also generally applicable to collecting institutions. This is achieved by close reading of the discovered resources to test and to demonstrate the nature and commonality of structure, policy and power; to understand the opportunities and challenges of change, structural relationships, the role of public policy and what are the means of influencing power.

No specific period constraints are applied to the resources and for the first part of the chapter on the wider public sector some academic sources from the United States are cited. Material on political theory is excluded from the search process since, as noted in 6.1.1, the focus is on the organisational and operational issues of structure, policy and power.

6.2 THE PUBLIC SECTOR

6.2.1 **STRUCTURE, POLICY AND POWER**

In the UK the public sector is an important part of the economy. Its structures and services have a long history and are deeply embedded within society, through a complex pattern of organisations and relationships. It operates at national level through Parliament, Departments of State and associated external non-departmental public bodies and commercial contractors. Locally, similar configurations of organisations and relationships operate through the local government infrastructure that receives funding from both local and national taxation. The result is an intricate network that while structurally stable generally fails to operate as a coherent ecosystem (Chapman, 2004). Historically there have been ongoing tensions between national and local government concerning resource allocation and freedom of action, and, often, different agencies and departments appear to operate in competition rather than in partnership (Mulgan, 2009). It is beyond the scope of this research to examine in depth these resulting complex behaviours, good or bad. Rather, they will be referred to where appropriate in considering the specific circumstances and aspirations of collecting institutions.

The purpose of the public sector is to deliver value through the implementation of public policy guided by policy objectives; what Birkland (2005, p18) refers to as "whatever governments choose to do or not to do*"* and Moore (1995, p30) calls "collective aspirations". These definitions may not assist detailed understanding of structures and processes, but they are a reminder that public service is rooted in choices made through political processes and implemented by organisations mandated to transform policy and resources into public value that meet the pre-determined policy objectives. In the UK, until the second half of the 20th century, policy addressed relatively unchanging and discrete issues such as defence, economic development, foreign policy, education and basic public health needs (Richards and Smith, 2002). Public administration reflected Weber's principles of bureaucracy:

> "Weber's well-known ideal type or "list" of six features that characterise a bureaucracy: i) it covers a fixed area of activity, which is governed by rules; ii) it is organised as a hierarchy; iii) action that is undertaken is based on written documents (preserved as files); iv) expert training is needed, especially for some; v) officials devote their full time to their work; and (vi) the management of the office follows general rules which can be learned." (Swedberg, 2005, p19)

With the advent of the welfare state after the Second World War and the increasingly complex and interconnectedness of national and global events, new theories of public administration began to be tested. In the 1970s, neo-institutionalism applied a sociological perspective on the pressures bearing on public sector institutions to understand how those might deal with change within the constraints of traditional structures (Fernández-Allez and Llamas-Sánchez, 2008; Powell, 2007). Again, in the 1970s, New Public Management policies attempted to mirror the private business with tools such as transaction costs economics (Kaboolian, 1998; Rhodes, 1997). More positively, Moore's work on public value in the 1990s aimed to make a distinction

between public and private and create a measure more subtle than simply judging a financial balance sheet:

> "The collective aspirations, in turn, establish a presumption of public value as strong as the presumption of private value created by market mechanisms… So, we should evaluate the efforts of public sector managers not in the economic marketplace of individual consumers but in the political marketplace of citizens and the collective decisions of representative democratic institutions." (Moore, 1995, p30)

Moore's work has been widely researched and taken up by organisations such as the BBC (British Broadcasting Corporation, 2004) and The Work Foundation (Coats and Passmore, 2008).

Time-travelling bureaucrats from an earlier age would naturally see differences in the scope of public service and might struggle with concepts such as public/private partnerships, contracting out and targets. However, they would probably quickly recognise the traditional Weberian bureaucratic principles. In Ison's words (2010, p219) "…our current governance arrangements for the most part are designed to maintain hierarchical, command and control decision making". Peters and Pierre make the important point, that the primary purpose of public organisations is not to be customer friendly and efficient, rather to, " …ensure a uniform and unbiased implementation of the law" (Peters and Pierre, 2007, p6). In today's terminology, the orthodox structural form of top/down, command and control is referred to as *vertical integration*. The general effect is to create hierarchical structures (silos) focused on the management of services within a framework of institutional purpose and priorities that makes possible formal accountability. Such structural arrangements frequently have multiple layers that may lead to the re-interpretation of higher-level efforts of command and control to match local priorities and needs. Additionally institutions such as collecting institutions may be located well below the level of policy and influence. A local authority museum, library or archive may be part of a division within a department responsible for a large portfolio of service provision. In such circumstances the practitioners may have to compete for resources within that larger department alongside other service offers and may have no direct opportunity to influence policies at the political levels of the local authority.

In recent decades the word 'bureaucratic' has come to be used pejoratively; implying slowness to deal with issues or to react to change, focused on rules and regulations frequently to the chagrin of the citizen/customer. Yet, bureaucracy is neither a predetermined or natural force nor inherently harmful (Starbuck, 2005). Rather it is a set of theoretical concepts created to describe observed phenomena. Consistency, stability, defining rules applied neutrally, and reliability that comes from bureaucratic processes, have ensured that essential public service is sustained year on year and is available to anyone with the right to use the service. Public service is important since it provides services considered essential to the well-being of the individual and society and it is therefore crucial that they are not altered or withdrawn on the whim of an individual or group with the power to do so. Additionally, alongside the social risks of radical change, there may be high transaction costs in reforming physical infrastructure and reskilling

workforces. In previous generations when social expectations and opportunities were more limited and when the range of service possibilities was less complex, evolutionary advancement through vertical integration was unchallenged (Egeberg, 2007). Chapter Four has already demonstrated the realities of the effects of the Network Society on private organisations and society – globalisation, engagement, competition, new relationships between the supplier and the user – all of which invite questions about the existing structures and practices of the public sector (Inayatullah, 2008; Systemist, 2001).

In examining the balancing act between service stability and the possibility of structural change it is, naturally, important to consider the controlling forces of vertical integration. Peters and Pierre's definition of public service as the implementation of the law is workable so far as there is a clear and specific law to be enforced. Today, much of public provision, while enshrined in enabling law (allowing tax funds to be expended), is likely to be defined by policy guidance rather than specific Acts of Parliament (Ison and Collins, 2008). Control consequently depends both on the clarity of policy guidance and also the power of actors within the structure to interpret that policy. There are occasions when broad generic policy guidance has significant power on implementation. The most topical example is central government's present policy to reduce public expenditure that, while specifying what cuts cannot be made (to protect core services), leaves open decisions about reductions to departments within central government or to individual local authorities for which the choices available may be constrained. Equally, there are other occasions when generic policy directed at specific service areas provides only limited practical help in setting priorities. By way of example, the following address collecting institutions of various forms:

> "…a comprehensive and efficient service to all those wishing to make use thereof" (Great Britain, HM Government, 1964, c57)
>
> "…it shall be the duty of the Trustees to keep the objects comprised in the collections of the Museum within the authorised repositories of the Museum" (Great Britain, HM Government, 1963, c24)
>
> "…public records selected for permanent preservation under this section shall be transferred not later than thirty years after their creation either to the Public Record Office or to such other place of deposit" (Great Britain, HM Government, 1958, c61)

These may be essential mandates – at least the second and third are specific in their requirements – but such statements leave a great deal unsaid about the 'how and the why' of institutions and what is their defining purpose within public policy. Aspects of policy guidance may be addressed through reports and policy statements issued by or for Departments of State or by specific programme directives, but the complex processes and diverse audiences of public institutions means the professional skills of managers and their values play a significant role in the interpretation of such guidance and directives that may be available (Meyers and Vorsanger, 2007; Lynn, 2007). This may place the practitioner in a very powerful position of controlling the delivery through judgment and technical expertise. Clearly as tools of public policy, public service institutions have a duty to understand and respond to those policies, yet as a number of

writers on public administration have pointed out, and as noted above, policy guidelines may be unclear or non-existent (Lane, 2000; Cairney, 2011). There may be tension between the need to sustain existing services and respond to new policy initiatives or external factors (Lynn, 2007) and as a result, within the constraints of the top-down structure, professional discipline-based values may dominate. Weber warned of the "…drive for bureaucrats to be their own masters" (Lane, 2000, p57) while Lipsky argues that in reality policy will always be made by *street-level bureaucrats* such as doctors, teachers, welfare officers, police officers and, presumably those managing collecting institutions:

> "Bureaucrats are subject to an immense range of, often unclear, requirements laid down by regulations at the top, but are powerless to implement them all successfully… this is not necessarily an argument based on 'disobedience': committed workers do not have the resources to fulfill all their job requirements." (Lipsky, 1980, p14)

This perspective, emphasising the significance of local control, is supported both by Meyer and Vorsanger (2007) and Cairney who suggests that uncertainty and lack of resources leads to strategies that preserve, "…a sense of professional autonomy necessary to maintain morale" (Cairney, 2011, p37). On the other hand, Schön (1991, p40) warns that the constraints of the vertically integrated structure restrict strategic thinking and create practitioners whose worldview is one of *technical rationality*. The priority is always to manage the processes and operations that can be undertaken within the limitations of the organisational structure:

> "But with this emphasis on problem solving we ignore problem setting, the process by which we define the decision to be made, the ends to be achieved, the means which may be chosen."

In **Beyond the Stable State** he examines in depth the behaviours of social systems including practitioners with shared values, such as professional groups within the public sector. He describes the natural resistance to change of such groups as "dynamic conservatism" which he defines as:

> "…a tendency to fight to remain the same… A social system is a complex of individuals which tends to maintain its boundaries and its patterns of internal relationships. But given internal tendencies towards increasing disorder, and external threats to stability, energy must be expended if the patterns of the system are to be held stable." (Schön, 1973, p32)

This section has addressed three fundamental features of public sector organisations, features that may also be observed in larger organisations in the commercial world. These are structure, policy and power. Structures have been generally robust and long-lasting, save for name changes and on-going evolutionary change. *Vertical integration* has been effective in sustaining service delivery to specific ends providing accountability from the point of delivery up to policy level. Government policies and services have become ever more diverse in their scope in recent years leading to increasing complexity in their effective management. It has become the case that while broad policy is set at the top level, its interpretation and implementation into action is pushed down to those managing services to make the detailed decisions of process and priority. Such patterns exist in many different disciplines. Although in principle this kind of

dependency can be effective, implementation within the silos of vertical integration raises the possibility of different interpretations and different priorities being applied within different departmental structures. This may be the result of poor policy definition or the ability for those within the hierarchy to interpret policy guidance in particular unintended ways; to resist those aspects that are unpalatable or develop particular local policies based not on the command structure but on their knowledge of the operational environment. It might also be the result of inter-departmental rivalry. Policymakers will certainly have control of investment, but there remains considerable power at the local level to effect decisions on service delivery within the resources available. The Tables below summarises factors identified within this section:

STRUCTURE
1. ORGANISATIONAL STRUCTURE a. The institutions exist within vertically integrated silo structures. b. This produces hierarchical layers of management focused on delivering service outcomes defined by the vertical structure thus discouraging strategic collaboration horizontally. c. While such structures provide stability and reliability they discourage cross-organisation strategy creating tensions in the delivery of complex service requirements involving a variety of agencies. 2. ORGANISATIONAL PRACTICES a. Public administration operates through bureaucratic processes designed to ensure command and control up and down the vertically integrated organisational structures. b. Processes designed to maintain a status quo within policy-defined parameters leading to avoidance of radical change that may be both expensive and risky. c. To be effective, such controlling mechanisms require that all layers of the hierarchy have a clear understanding of their scope and purpose through policy direction and operational custom and practice.

Table 6.2 *Summary features of structure in the public sector*

POLICY
1. THE PURPOSE OF POLICY a. Policy is the means by which the objectives of public service are defined and their delivery judged. Policy and objectives provide the framework for command and control systems. b. Policy delivery through public sector hierarchies is most effective when it is clearly defined in purpose, has an explicit audience and does not conflict or overlap with other policies. 2. THE LIMITS OF POLICY a. Since the middle of the 20th century UK public service has faced increasingly complex and inter-connected issues of service delivery and strategic direction, policy and delivery that, to be effective, requires different organisations to work more closely together. b. However, the hierarchical structures of public services acted (and act) to constrain horizontal strategic governance and implementation across multiple organisations. c. In this situation policy tended to become more generic since different organisations might be required to undertake different tasks within the same strategy. d. In the absence of specific mandates practitioners may become *street-level bureaucrats*, using professional judgment to decide on priorities at local level.

Table 6.3 *Summary features of policy in the public sector*

POWER
1. THE NATURE OF POWER IN PUBLIC POLICY a. Power is the means to influence and/or direct the development of policy agendas and policy tools. b. In increasingly complex service requirements the power to judge whether public value has been delivered becomes more difficult. c. Power may take the form of central direction 'from the top' or of effective lobbying by some agency to persuade policymakers to underwrite their strategic aspirations. 2. LAYERS OF POWER a. The power to develop and implement national and local policy sits with elected representatives and their advisers. b. As noted above, in the absence of very clear policy direction, practitioners may have considerable influence on how policies are implemented at service level, while having little influence on the priorities set within national or even local policies and strategies. c. Long-established merit good services may achieve power in the form of legitimacy rooted in a public consensus that the service is of general value to the community or wider society.

Table 6.4 *Summary features of power in the public sector*

6.2.2 PUBLIC SECTOR CHANGE AND INNOVATION

> "If retailers operated like government, they'd go bust." (Bracken[63], 2015)

The present pattern of structures and policy frameworks within the public sector is rooted in a number of long established behaviours; custom and practice defining progress, protecting the locus of power and control, the inherent conservatism of bureaucracies, resource famine, the political imperative for short-term success and the need to sustain existing services. In addition the effects of vertical integration have included the proliferation of similar service types across different Departments of State. Over 40 years ago, in his BBC Reith Lectures, Schön (1973, p30) argued that it was no longer possible for society and its institutions to remain stuck in their current form since the future would demand continuous change:

> "…we must invent institutions that are 'learning systems', that is to say systems capable of bringing about their own continuous transformation".

The sociologist Bauman reformulated this argument in his 2007 study on the challenges faced by the contemporary world:

> "First of all, the passage from the 'solid' to the 'liquid' phase of modernity: that is, in a condition in which social forms (structures that limit individual choices, institutions that guard repetitions of routines, patterns of acceptable behaviour) can no longer (and are not expected) to keep their shape for long, because they decompose and melt faster than the time it takes to cast them, and once they are cast, for them to set. Forms, whether already present or only adumbrated, are unlikely to be given time to solidify and cannot serve as frames of reference for human actions…" (Bauman, 2007, p1)

So, there may be many risks in resisting change, just as there are risks in changing and consequently destabilising essential public services. Yet public service is by definition for people and therefore must understand and respond to the changing needs of those same consumers who today are relying more and more on the Internet. This dialectical tension between that need for stability and an urgency to respond to technical and social change are brought sharply into focus. In recent years, the need for more strategic and co-operative approaches to policy formulation and implementation has begun to be recognised. A 2010 Parliamentary report gave a damning judgment on central government's ability to develop strategic policy:

> "Evidence to us suggested that in fact cross-departmental collaboration is variable, analytical resources are under utilised and that different departments understand and discuss strategy in incompatible ways. Departmental collaboration therefore falls short of what individual departments can do independently. The whole is less than the sum of the parts." (Great Britain, House of Commons Public Administration Committee, 2010, para.60)

The report drew attention to examples of unanticipated competition as multiple service agencies target the same audiences, risking duplication and confusion. In a society increasingly expecting one-stop integration and personalisation and with politicians calling for better joined up strategy, the realities of public service provision may look increasingly out of step. However,

[63] Executive Director of Digital in the Cabinet Office.

despite the expectation that policies and services will be long lasting, only limited work has been undertaken to look strategically at possible future configurations of institutions' structures and the Internet. There are two examples of future scanning that go some way in that direction.

Foresight[64], at the Department of Business, Innovation and Skills ("our role is to help Government think systematically about the future") has, for more than 10 years, undertaken evidence-based studies to identify potential trends up to 50 years into the future. Recent studies have included climate change, obesity, flooding and sustainable energy. From the evidence available[65], these studies have acted as catalysts for greater awareness between government and other interested agencies and in some cases have supported the development of cross-department policies. **Beyond Current Horizons** is a comprehensive, academically researched project to identify key technological trends and their implication for primary and secondary education in 2035. The final report highlights the possibility that trends might fundamentally change the form of and relationship between public institutions and their audiences and calls for sustained strategic engagement by all interested parties (Facer, 2009).

In parallel with these long-term planning studies, authors such as Mulgan (2009, p22): "There are no fair winds for those who do not know where they are going…" and Chapman (2004) have argued for the value of strategic policies involving far greater horizontal collaboration. Fairtlough (2007, p28) describes this as "responsible autonomy" where delivery agencies have autonomy for how policies should be delivered, but are accountable for the outcomes. He also makes the point that hierarchical or command and control approaches are very poor at managing variety and surprise and the uncertainty of "wicked problems" that:

> "…go beyond the capacity of any one organisation to understand and respond to, and [where] there is often disagreement about the causes of the problems and the best way to tackle them…key ingredients in solving or at least managing complex policy problems include successfully working across both internal and external organisational boundaries and engaging citizens and stakeholders in policy making and implementation." (Australian Public Service Commission, 2007, p1)

Ison (2010, p4) suggests that the present arrangements, that allows technical expertise to drive the processes of management and delivery, reflects the principles of responsible autonomy, but lacks the means to encourage strategic reflection about future possibilities.

While there is a range of opinions expressed both inside and outside of government about the need for more integrated, strategic approaches to policymaking there appears to be little appetite for fundamental structural change or even serious discussion about possible options (Mulgan, 2009). The point has been made several times that the public sector faces complex and interwoven issues: to set priorities within limited resources, to sustain existing essential service propositions, to operate effectively and to be able to demonstrate that public value has been achieved. The established organisational structures have, until recently, provided a firm

[64] Foresight website. Available at: http://www.bis.gov.uk/foresight [accessed 17th November 2013]
[65] Foresight website. Programme impact. Available at: http://www.bis.gov.uk/foresight/our-impact [accessed 17th November 2013]

foundation for addressing such matters. Yet, today, policymakers and practitioners are frequently expected to make urgent short-term resources decisions – dealing with budget cuts, for example – that will have long-lasting policy effects, precisely at the time when the Internet is changing fundamentally the expectations and behaviours of the majority of UK citizens (Dutton and Blank, 2013).

The public sector may not, so far, have faced the need for radical change apparent in parts of the private sector (see Chapter Four), but it would be wrong to suggest that there are not examples where the need for change has, at least, been recognised and responded to. Examples include:

i) **Inter-Organisational Networks** - Local Enterprise Partnerships Network[66] links national government departments with local authorities, chambers of commerce and with educational institutions such as universities.

ii) **Taskforces**: Health Visiting Taskforce[67] to champion the government's commitment to improve services and health outcomes in the early years for children, families and their communities.

iii) **Champions**: Leaders who review key problem areas, such as dealing with antisocial behaviour[68], and government's future exploitation of digital technologies[69]

iv) **Top down innovation**: The last item in iii) – the exploitation of digital technologies – is an important example of a new approach to central government strategy. It is a first for several reasons:

- The recommendations for action written by the then Digital Champion, Martha Lane Fox, is not an extensive policy report to Parliament, but a concise report with just four recommendations, sent as a letter to the Minister for the Cabinet Office[70].
- As a result of the report the government acted quickly to bring about a radical re-organisation of its public-facing digital strategy.
- The outcome has been a rapid transformation of the government's transactional and informational online services in a single user-friendly website (https://www.gov.uk).

In the autumn of 2011 the government appointed a Director of Digital[71] to establish a consistent approach to a policy that has become known as 'Digital by Default'[72]. The Director, Mike

[66] LEP Network website. Available at: http://www.lepnetwork.org.uk/leps.html [accessed 20th November 2013]
[67] Health Visiting Taskforce website. Available at: https://www.gov.uk/government/policy-advisory-groups/health-visitor-taskforce [accessed 20th November 2013]
[68] Active, Safer Communities website. Available at: https://www.gov.uk/government/publications/baroness-newlove-s-role-as-champion-for-active-safer-communities-from-2010-to-2011 [accessed 20th November 2013]
[69] DirectGov 2010 and Beyond. Available at:. https://www.gov.uk/government/publications/directgov-2010-and-beyond-revolution-not-evolution-a-report-by-martha-lane-fox [accessed 20th November 2013]
[70] Lane Fox letter. Available at: https://www.gov.uk/government/publications/directgov-2010-and-beyond-revolution-not-evolution-a-report-by-martha-lane-fox [accessed 20th November 2013]
[71] Cabinet Office release. Available at: http://digitalengagement.cabinetoffice.gov.uk/blog/2011/05/20/mike-bracken-appointed-as-hmg-executive-director-for-digital/ [accessed 20th December 2012]

Bracken, an executive who worked previously on digital innovation in the commercial sector, made very clear on his appointment that the Government's style of Web development – taking three years to complete, costing millions of pounds and having no consistency across departments – must end. His message was: build quick prototypes, design with empathy for the user, think, so the user does not have to, never get the ultimate product first time – iterate and refine, if it cannot be done in three months it is not worth doing[73]. An approach that has echoes of Naughton's "frictionless innovation" described in Chapter Four. All government services were to be digital by default and all would be designed around a common play book of guidelines and standards and be accessible through a single user-friendly portal. The Government Digital Service (GDS)[74] sits in the Cabinet Office where it has the power to *enforce* the new policies on all departments:

> "There are two key implications of the strategy of Digital by Default which came out of the government's response to Martha Lane Fox's report. The first implication is that government itself needs to become digital in thinking in order to deliver services which are suitable for users. The second implication is that as digital by default comes into effect the scale of government service provision will grow dramatically and the quality and user centricity of major commercial Internet properties should be our minimum goal. We aim to make the products and services built by GDS not just best in class, but stand shoulder to shoulder with the sort of digital experience that users come to expect from daily interaction with the giants of the web."[75]

This new strategic approach is working to the extent that in 2013 the website won the Design Museum's Design of the Year Award:

> "The jury unanimously agreed that gov.uk was the overall winner for Design of the Year 2013 for its well thought out yet understated design, making the user experience simpler, clearer and faster. The website is regarded as one of the leading government websites in the world."[76]

This radical shift has not changed the oganisational structure of government. Yet it is a beacon of what is possible with sound and effective policy backed up with the power necessary to ensure implementation. It introduces a common set of requirements and behaviours *across* all departments, has reduced costs while providing an improved experience for the user.

Neither has the development had impact on local government web services that remain highly fragmented across the UK, in both presentation and scope. Both the evidence of searching local authority websites described in Chapter Five and a recent opinion piece in Digital By Default News suggest that local government has not kept pace with the kind of change in central government that has been brought about by gov.uk. A recent report from the New Local

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[72] RaceOnine2012 release. Available at: http://www.cabinetoffice.gov.uk/news/digital-default-proposed-government-services [accessed 1st June 2012]
[73] Researcher's notes made at a Digital Leaders workshop at the Department of Business, Innovation and Skills on 13th October 2011
[74] Government Digital Service website. http://digital.cabinetoffice.gov.uk [accessed 20th November 2013]
[75] Extract from GDS Website. Available at: http://digital.cabinetoffice.gov.uk/about/ [accessed 20th November 2013]
[76] Press release. Available at: https://www.gov.uk/government/news/govuk-wins-design-of-the-year-2013 [accessed 20th November 2013]

Government Network – **Smart People, Smart Places** – identifies a range of weaknesses that continue to constrain innovation in local government (Beresford, 2014). In a blog on the report Digital By Default News commented:

> "It describes a world in which digital development is still peripheral, with councils failing to exploit the potential of digital to deliver integrated and personalised services, engage and empower citizens…Perhaps the most damning criticism is that councils are failing to create a culture where staff and councillors feel trusted to innovate with technology and have the confidence to invest in it and use it." (Vize, 2014)

There has continued to be debate concerning the continued fragmentation of local government websites with the Policy Exchange's **Technology Manifesto** in June 2014 proposing that local government adopt the gov.uk strategy of a single website:

> "As well as saving money, this could help create a more predictable and consistent experience for citizens as they move around the country" (Copeland, 2014, p25)

None of this has yet changed online services in local government.

v) **Service Leadership - Strategy and Policy**: This final example demonstrates the power of influence that can be achieved by strong leadership. The Post Office network has a duty to provide service to all citizens. No direct comparison of organisational structure, service complexity or roles is suggested; rather this example highlights the impact of a very different relationship with government. Just like collecting institutions, post offices have a very long history[77], and for much of that history they were an integral part of public service, becoming a fully independent company in 2012. However, despite the drift away from direct control through a central government department, post offices have continued to provide government related services and consequently have received grant aid in support. In *Securing the Future: Strategy 2020* Post Office Ltd presents a co-ordinated programme of development:

> "We are outlining our strategy to secure the future of the Post Office with ambitious plans for a modern, digital and thriving business in 2020… We will provide support for around 3,400 crucial community and outreach Post Office branches with a new £20 million programme. Many of these branches will be the only shop left in the community, providing key services and sometimes acting as a crucial lifeline for vulnerable customers. As a commercial business with a public purpose we are absolutely committed to supporting this element of our network." (Post Office Ltd., 2013, p4)

The £20 million is a small percentage of government funding of £640 million provided to Post Office Ltd to modernise all post offices over the next five years. The Department of Business, Innovation and Skills' (BIS) November 2013 press release provides a quote from the Post Office Minister:

> "The Post Office is a vital part of our social fabric at the heart of our communities. Its network of over 11,500 branches has unparalleled reach up and down the country. The government is keen to maintain the key role that Post Offices play. Today's investment

[77] The popularisation of postal services came about in 1840 with the launch of the Uniform Penny Post, at the time that museums and libraries were being promoted as services of universal social value. http://en.wikipedia.org/wiki/Uniform_Penny_Post [accessed 10th July 2014]

> will continue to build on the success of the Post Office modernisation programme which is already well underway. We recognise the important service that Post Offices provide to small and often remote communities, sometimes even as the only shop in the area. This is why we are dedicating specific funding to support modernisation and strengthen the existence of these branches."[78]

Such sentiments are equally relevant to the roles and reach of collecting institutions. Yet, today, no simple way exists for them to achieve recognition of such collective value within national policy. The next section will show that while collecting institutions may share collective historical roots, they lack a unified history within a single institutional framework and are thus not able to lobby effectively with the single public voice of a strong chief executive. However, setting aside these differences, the example shows that, within an effective network, it is possible for small local institutions to be heard and to gain policy traction. The approach being followed by Post Office Ltd to promote and develop its services is in marked contrast with the realities of strategic development across collecting institutions.

The Table below provides a summary of the factors described in this section:

CHANGE AND INNOVATION
1. RISKS OF STRATEGIC CHANGE: the price of making mistakes include both financial and social penalties engendering a culture of risk aversion in bureaucratic structures
2. ORGANISATIONAL CONSTRAINTS: Strategic change is constrained since, traditionally, vertical integration restricts inter-organisational planning and implementation
3. COLLECTING INSTITUTION SPECIFIC NEEDS: maintaining and exploiting physical collections over time places additional constraints on radical change due to traditional user expectations and sunk investment
4. INCREMENTAL CHANGE: In consequence generally innovation has been incremental, undertaken within existing organisation structures of power and procedure. It has been 'sustaining innovation' to maintain a status quo that does not challenge established services paradigms
5. THE LIMITS OF INCREMENTAL CHANGE: The increasing speed of change and complexity of social needs means that an incremental approach to strategy and change may become increasingly disconnected from the needs (behaviours and expectations) of the user. While most change and innovation continues to take place within traditional practices and structures, public sector examples of strategic projects and long-term planning activities were identified (see section 6.2.2).

Table 6.5 *Summary of factors associated with change and innovation*

[78] BIS press release 27 November 2013. Available at: https://www.gov.uk/government/news/post-office-secures-additional-government-investment-to-complete-branch-modernisation [accessed 6th December 2013]

6.3 COLLECTING INSTITUTIONS IN THE WIDER PUBLIC SECTOR

6.3.1 EMERGENCE OF PUBLIC KNOWLEDGE COLLECTIONS

Collecting institutions do not inhabit a single shared position within the hierarchies of public service. National museums, libraries and archives are directly accountable to Departments of States in each of the four Home Nations, while many regional and local institutions are within the structure of educational infrastructure or local authorities that, in turn, fit within the structure of national government for policy and much of their funding. While some services are now *contracted out*, to be run by commercial or third sector organisations, for policy and funding the institutions will still be positioned within public sector structural arrangements. Some groupings of institutions, within schools, colleges and universities for example, have clear audience mandates and a broad framework of national policy within which to work, while others have a general duty to serve anyone and everyone.

With such a mélange caution is necessary in providing a critique based solely around vertical integration and bureaucracy. Collecting institutions have never fitted unambiguously into a single policy framework. Since that is the case, it is important to examine briefly their emergence in the public sector and the various reasons why they have continued to achieve public policy and funding support over an extended period of time. This historical view provides a backdrop for consideration of the practitioner view of purpose and the contemporary policy view in the next section of this Chapter.

> "There were accumulations of art, books and other luxury goods among the rulers and wealthy elites of many early civilisations, including those of China, India, Egypt, Sumeria, Assyria, Persia and Babylonia". (Belk, 2001, p2)

For much of history, most collecting had little to do with the creation of organised collections with any defined *collective* public purpose. Until the latter part of the 18th century collections of artifacts might serve to support religious belief or act as treasuries (literally collections of treasure) that might be traded or even melted down (Belk, 2001). Across the 17th and 18th centuries, with explorers returning from distant lands with strange objects and specimens, increasingly private collections were presented as "cabinets of curiosities'' (Wunderkammern) to surprise the visitor allowed to view the collection:

> "Early collectors arranged their objects so as to create surprising or striking contrasts… very large items are juxtaposed with the very small – an ostrich egg and the egg of a hummingbird is one instance, a giant's (dinosaur's) bone and the bone of a bat is another." (Kenseth, 1991, p249)

The treasures of the Hapsburg dynasty collected from the 13th century onward are an example of collecting with private purpose; in this case to demonstrate the great wealth of the dynasty, both to other nations and to the populous at large (Kaufmann, 1994). Manuscripts and early printed books might form part of such collections, but up to the 18th century, institutions had for hundreds of years collected manuscripts to build libraries. Religious tracts formed the contents of collections in cathedrals and some parishes while the early universities collected documents

of ancient learning (Black & Hoare, 2006, p12). Access to such collections was restricted to the minority able to read and also able to justify their use of these precious artifacts. From the middle of the 17th century to the peak of the Enlightenment a hundred years later these collections were transformed:

> "…libraries moved from being storehouses of treasures and treasure chests of knowledge to become important parts of the scientific revolution" (Nelles, 2006, p23)

This paradigm shift in purpose was reflected also in the nature of museum collections, as the drive to classify the natural world produced more order and rationality in collections, so the wider quest for knowledge through learning made access to collections to examine and understand the objects and their relationship with other objects an imperative (Bennett, 1995). The founding of the British Museum in 1753 as an encyclopedia of knowledge (Sloan, 2003) exemplifies this shift, both in gathering together and ordering existing collections previously in private ownership – Cotton, Sloane, Harley and, later, the King's Library (Siegel, 2009) - and in opening up those collections to wider public access. Such processes of transition took hold across Europe in the 19th century, for example the transfer of the Hapsburg collections to form the foundation of Vienna's Kunsthistorisches Museum (Kaufman, 1994). At the same time an increasingly literate, but poor population needed access to printed books and other material. Across the 18th century libraries accessible to the public grew up as endowed town libraries, parish libraries, workingmen's groups (e.g. Mechanics Institutes) and circulating and subscription libraries (Raven, 2006; Rose, 2001). The development of both museums and libraries in the period between the beginning of the 18th century and the mid-19th century reflects a response to the steady emergence of a consumer society (Belk, 2001; Innes, 2006). The increasing economic mobility, with more people with more money than they needed just to live at subsistence level, made reading and viewing collections part of the social orthodoxy; offering the means to greater learning and refinement (Knell, MacLeod & Watson, 2007; Message, 2006; Innes, 2006).

The third element of the collecting institution triumvirate, the archive, has as long a history as the library and museum and has, it might be suggested, held a more noteworthy place in the political arena up to the 19th century. The archive as public record holder is a core tool in the enforcement of public decisions, agreements of financial exchange and actions to enforce the law. As holder of original documentary evidence it is the place of final proof. In **The Past is Prologue: A History of Archival Ideas Since 1898, and the Future Paradigm Shift** Cook, quoting former National Archivist of Canada, Jean-Pierre Wallot, writes:

> "The resulting 'houses of memory', in his words, will contain 'the keys to the collective memory' of nations and people, and to the protection of rights and privileges. Thereby the world's citizens can open the doors to personal and societal well-being that comes from experiencing continuity with the past, from a sense of roots, of belonging and of identity." (Cook, 2001, p18)

Of course, for much of history such collections were held for political rather than public reasons since they remained the tools of the holders of power and frequently the mechanisms of power

to hold others to account. Before the advent of reliable public accountability, as Cook points out, archives might well be used not just as memory institutions, but as 'forgetting' institutions:

> "Medieval archives, scholars now find, were collected – and later often weeded and reconstructed – not only to keep evidence of legal and business transactions, but also to explicitly serve historical and sacral/symbolic purposes, but only for those figures and events judged worthy of celebrating, or memorialising, within the context of their time." (Cook, 2001, p18)

This is not just a matter of historical relevance to the archives sector, as Cook points out in the same section of his article. He draws attention to the fact that collective remembering and forgetting takes place in all collecting institutions; what Weinberger (2012) describes as "back-end filtering" – the owner/practitioner making choices about what the future user should and should not see. The challenges of back-end and front-end filtering (allowing the user to filter) are important to the future of collecting institutions.

Despite the lack of any collective co-ordination, we may see, across the passage of the 19th and 20th centuries, a number of converging factors that suggest common themes for collecting institutions. The most significant external driver was the increasing professionalisation of the public sector. The 19th century social and political reforms at national and local levels produced more consistent service provision than previously (Seaman, 2002). The broad commitment to education for all and self-improvement alongside the emerging consumer society changed the scope and consistency of public service and the expectations of the populace. The enabling powers of the 1850 Public Libraries Act, if not a herald, was at least on the cusp of the shift from the laissez faire radicalism of earlier times to a paternalism that was to turn unrestricted individualism into a political system where:

> "The greatest freedom for every individual was possible only within the framework of the collective state". (Wood, 1960, p326)

The effect of this increasing democratisation of public policy was seen directly in improvements in public health and sanitation and the development of universal education. The modern concept of collecting institutions became steadily more apparent: the public library movement within the newly empowered local authorities as storehouse of recorded knowledge for all (Morris, 1977); the academic libraries at the heart of the new civic universities (Black and Hoare, 2006); the museum as shop window into the past supporting social refinement and, sometimes, reinforcing national identity (Bennett, 1995), and in parallel, the growing demands of public service and the need to record processes, decisions and activities placing new demands on public record offices and other public archival collections to act as the memory of public policy, and the guardians of probity (Museums, Libraries and Archives Council, 2004b).

This evolutionary process, riding on the back of a nascent democracy, presents the foundations for the form and the functions of collecting institutions at least until the late 20th century, and for some aspects, until the present day. Yet the evolution was in a very real sense haphazard and arbitrary for two reasons. First, despite the multiplicity of museums and libraries active by the middle of the 19th century and despite their sharing a core purpose of collecting for use by

audiences of whatever size and scope, there was no consistent framework of professional practice, no sense of shared mission and certainly no clear definition of what specific public policy purposes might be achieved (Pemberton, 1997; Knell, MacLeod and Watson, 2007). The same is true for archives generally and the public record in particular. Although six Royal Commissions between 1800 and 1837 examined issues such as the disparate storage of central government records and their accessibility it was only with the Public Record Office Act of 1838 that genuine steps were taken to systematise national record keeping. While this legislation had no direct bearing on archival collections outside of national government, it did, at least, offer the first steps towards the professionalisation of the roles of archivist and historian (Shepherd, 2009). As a result, the subsequent development of collecting institutions within the public sphere was to develop incrementally, building on a patchwork of institutions with different practices and purposes. In subsequent decades there emerged recognisably shared values and principles within the various types of institutions formalised in the birth of professional associations – Library Association (1877), Museums Association (1889), Society of Archivists (1947). Additionally, within libraries and archives, a recognition of collective value was made real in 1916 with the creation of the Central Library for Students that in 1931 became the National Central Library, coordinating inter-library lending (Sewell, 1956), and of the National Register of Archives in 1945 (Shepherd, 2009).

The second reason for haphazard and arbitrary progression into modern public service falls to the lack of genuinely effective national policy supported by robust legislation, designed to rationalise and improve museums, libraries and archives' social value. Elizabeth Shepherd sums this up for archives:

> "However, in England, there is no legislation making general provision for records and archives, nor is there a single authority or minister responsible for funding, policy and provision of such services. Instead there is a series of measures relating to records originating with various types of institutions (central and local government, the established church, manors) and policy responsibility is divided between several government departments. Legislative provision for central government records is fairly strong but that for other public authorities (including local government and universities) is weak. Business and private archives have little statutory protection. Most legislation is enabling not mandatory and, generally, legislation confirmed existing provision rather than driving future expansion." (Shepherd, 2009, p21)

This extract is quoted not simply because it connects archives' past with their current status within government policy, rather, accepting that specific details would change, it summarises well the present policy status of all collecting institutions. We may trace from 1850 to the present, for example, turbulence between local and national levels of government in the development of public libraries (Pemberton, 1997; Morris, 1977); in more recent years the same for local authority museums (Museums and Galleries Commission, 1991) and regional museums:

> "It is clear that the existing museums infrastructure with its diversity of governance arrangements and its multiplicity of representational channels represents a barrier to regional museums achieving their full potential." (Resource, 2001, p11)

Across all of the institution types under review there remains no single authority or minister responsible for funding, policy and provision of such services.

Given the comments previously of the importance of policy and influence as the tools necessary to guarantee public service provision, set against the varied landscape just described, it is important to be clear why publicly funded collecting institutions have survived as well as they have. Paradoxically, one of the most obvious reasons for the longevity of collecting institutions is precisely that they have a long history, and have become embedded within the governance, cultural and social fabric of society. They remain tools for learning and research, both formal and informal; support self-cultivation; are accessible storehouses of our histories recorded in documents and objects and can be places of inspiration. Their merit good value has provided a unique contribution to social well-being and development and, moreover, until the start of the new Millennium collecting institutions held the status of monopolies. Further, institutions have demonstrated their significance within specific public policy agendas:

- The university library has and continues to play a vital role in support of learning and research, in marked contrast to the situation in secondary education where often the provision of a good quality library is seen as an unaffordable luxury item (Douglas and Wilkinson, 2010).
- The role of public libraries as key agents of access for increasing public Internet access – The People's Network – remains a unique example of national collective action that attracted both policy support at the highest level and significant investment (Batt, 2009b).
- From the 19th century until recent times the self-cultivation role of the museum and the public library has offered a mechanism to encourage individuals to understand the need for *public conduct*, to guide people's social values and also to promote particular worldviews, for example, the promotion of national identity and national policies (Bennett, 1995).

Today, the landscape of collecting institutions remains, by variety and scale, inherently fragmented. In the United Kingdom there are more than 2500 collecting institutions falling within the ambit of the public sector, either directly within the structures of government or in receipt of grant aid to support public use. Moreover, their scale varies from the great national collections to small local museums, libraries and archives, from general services open to all, to research collections with access restricted within universities and colleges. Some services are statutory – the public library, the record office, some national museums; others are not mandated by statute but are widely provided – the university library; yet more exist because locally their social role is valued – local museums, school libraries and community history archives.

With regard to advocacy, it is important to note that each of the professional practitioner bodies conduct programmes of advocacy. For example:

1. Archives and Records Association
    - Advocacy and lobbying on particular themes, e.g. European Data Protection Regulations article. (Owens, 2014)
    - With The National Archives, annual Advocacy Awareness Campaign - Explore Your Archive - focuses on building audiences. (Archives and Records Association, 2013; White, 2014)
2. The Chartered Institute for Library and Information Professionals
    - Libraries All-Party Parliamentary Group[79]
    - Libraries Change Lives Award[80]
3. Museums Association
    - Museums Change Lives toolkit for advocacy[81], based on the outcomes of the MA's Museums 2020 programme (See Chapter 9.10).
    - Lobbying on national campaign issues such as funding cuts (Museums Association, 2014) and government strategies for museums.[82]

However, within the context of national policy influence, none of these examples has had significant long-term impact, nor is there any evidence of collaboration between the three institutions on joint advocacy and lobbying.

6.3.2 COLLECTING INSITUTIONS AND THE INSTITUTIONAL PARADIGM

From the evidence of this chapter a preliminary description may be provided of the scope and form of the Institutional Paradigm. The Research Hypothesis described this as a service paradigm based on 'physical collections maintained in fixed locations'. Key features, drawn from the chapter are listed below under the headings used in section 6.2.1. It should be noted that these features do not take account of strategy and innovation beyond 2000; the intention being to produce a benchmark against which to assess how far the effects of digital innovation have subsequently been adopted and developed by collecting institutions through reviews of strategy and research since 2000 presented in Chapters Eight through Eleven and synthesized in Chapter Thirteen:

[79] CILIP Website. Available from: http://www.cilip.org.uk/cilip/advocacy-awards-and-projects/advocacy-and-campaigns/libraries-all-party-parliamentary-group [Accessed 23rd December 2014]
[80] CILIP Website: Available from: http://www.cilip.org.uk/cilip/advocacy-awards-and-projects/awards-and-medals/cilip-libraries-change-lives-award [Accessed 23rd December 2014]
[81] Museums Association Website. Available from: http://www.museumsassociation.org/museums-change-lives/25062013-the-vision [Accessed 23rd December 2014]
[82] Museums Association Website. Available from: http://www.museumsassociation.org/campaigns [Accessed 23rd December 2014]

INFRASTRUCTURE
1. TOP/DOWN SILOS: Within the vertically integrated structures of public service
2. CONTROL, NOT COLLECTIVE ACTION: While a stable and controlling form of organisation, vertical integration constrains horizontal collaboration
3. DESTINATIONS: primarily physical collections and services in places to visit
4. FRAGMENTATION: caused by organisational structures and forms of audiences and collections
5. STABILITY: Neither incremental change nor structural fragmentation seriously hindered service delivery so long as social change was slow, funding levels were maintained and service monopolies uncontested
POLICY
6. SOCIAL PURPOSE AND PRACTITIONER VALUES: defined by a long process of incremental evolution
7. EXPLICIT POLICY: until the end of the 20th century limited to minimal direction for statutory services and some basic standards assessment tools
8. TACIT POLICY: For almost all of collecting institution history incremental evolution sustained a stable, monopolistic service paradigm that provided unchallenged and highly regarded merit good services
POWER
9. LOCALLY: in the absence of clear national policy direction practitioners may be able to influence priorities and methods within local governance structures
10. NATIONALLY: The tradition of local service (defined by geography or audience), the hierarchy of vertical integration and the fragmented nature of the three sectors have acted to constrain the ability to exercise collective power at national level to influence and shape policy

Table 6.6 *Collecting institutions and the Institutional Paradigm*

Institutional locus may be viewed both as a hierarchical positioning within the infrastructure – where they sit in the silos of governance – and as a positioning of institutional identity and status within the wider conceptual structures of power (Mulgan, 2009). In relation to infrastructure, for as long as their roles were uncontested and remained accepted as merit goods, making contributions to broad public policy agendas - learning, self-development, research, discovery and so on - the traditions of vertical integration and bureaucratic processes sustained operational activity without challenge. It is possible to illuminate further this paradigm as a schematic, showing the relationships between the siloed institution as an Organisational Ecosystem sitting within the ‘outer world’ society:

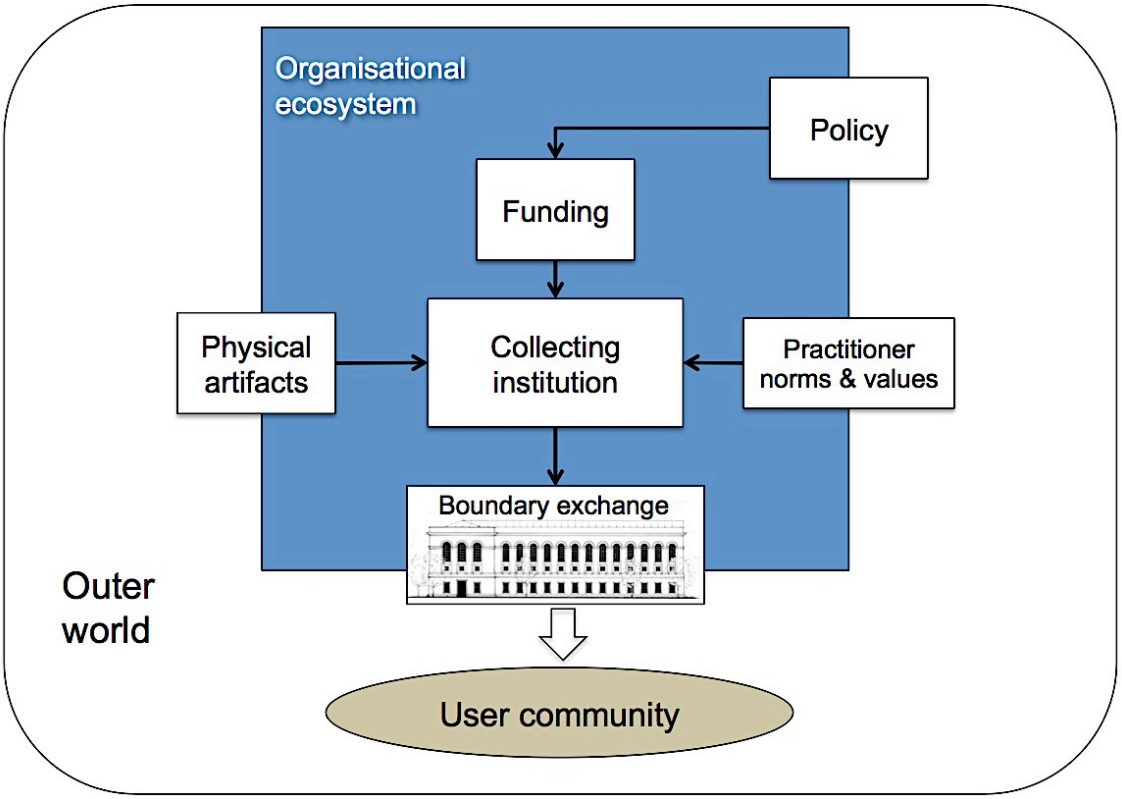

Table 6.7 *Organisational Ecosystem schematic*

Across collecting institutions there will be various structural and normative influences that will change the context of the elements included in this schematic. However, the intention is not to cover every feature fully, but to demonstrate the importance of the organisational setting in which collecting institutions have traditionally operated. The shaded box represents the organisational structure in which the institution sits – local authority, university, or other governing body – with policy sitting partly within that structure and partly in the outer world. Practitioner norms and values will be influenced by education, professional practice and tradition, and the exchange relationship between the institution and the user community is delivered through one or more physical locations. The consequence is that there are many unconnected Organisational Ecosystems operating independently. This schematic will be returned to in Part Three when recent developments and the modelling of digital developments in the future will be examined.

Concerning power, Table 6.6 draws attention to the ability of practitioners to influence how policy priorities are delivered at the local level, focused on maintaining a ‘status quo’, sustaining long lived, much needed and long tested service propositions, in the face of only general policy guidance (Lane, 2000; Cairney, 2011). For institutions mandated to curate and exploit collections of tangible things such an approach is vital. There is for museums and archives particularly a duty of long-term care, while for all institutions it is important that value is gained from the interaction that takes place between people and the collections. A consequence of this, highlighted in the work of Schön (1973) especially, is that codified professional knowledge and

practice have tended to focus on the application of technical rationality ahead of reflective and strategic thinking.

6.4 CHAPTER SUMMARY

From this review of the wider public sector and the form and nature of collecting institutions within it, the following conclusions were achieved:

- That despite there being a lack of clear, integrated policy for collecting institutions and practitioners' lack of opportunity to influence national policy, until recently the position of the institutions had been secure due to their monopolistic status and the ability of practitioners to direct and provide effective services to their communities of users.
- Vertical integration of services has provided stable mechanisms for the management and development of service based on physical things in physical places. Collecting institutions have been and continue to be highly successful in providing services within a traditional public service framework, but have been less successful at creating any collective identity that might influence national policy agendas.
- The evidence presented on the wider public sector and on collecting institutions was summarised in Tables 6.4 and 6.5 as the core elements that define the Institutional Paradigm that is a central concept in the Research Hypothesis.
- The realities of change and innovation across the public sector were examined, identifying weaknesses in strategic planning and horizontal collaboration. It also provided short descriptions of a number of specific examples of approaches to strategic planning and innovation.

This evidence will form a datum against which, in Part Three, to assess the extent to which collecting institutions are able to respond to and take advantage of the long-term opportunities of the Internet.

CHAPTER SEVEN
Strategic Approaches to Service Development

7.1 CHAPTER PURPOSE

This Chapter describes the methodological approach to the tasks associated with Research Objectives Four and Five that make up the final four chapters of Part Two. The chapters focus on the strategic development of collecting institutions and approaches to service innovation:

COLLECTING INSTITUTION ANALYSIS CHAPTERS THREE TO ELEVEN	
Objective	**Scope**
RESEARCH OBJECTIVE 4 Identify the form, components and priorities across collecting institutions that define and direct existing service propositions	• Examine organisational structures • Knowledge policy, wider policy, power structures, and clarity of service missions in relation to public policy • Values and norms as reflected in professional literature linked to institutional purpose and digital innovation
RESEARCH OBJECTIVE 5 Review examples of the development of digitally based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change	• Commitment and ability of institutions and practitioners to change their service worldviews in the face of external change • Examples of engagement with digital services • Review research on innovation and the diffusion of digital services provided by collecting institutions
METHODS: Textual analysis, literature review and monitoring of relevant social media and current awareness associated with social change and the Internet	

Table 7.1 *Research Objectives Four and Five*

7.2 BACKGROUND AND CONTEXT

Chapter Four predicted that the dynamic interplay between digital innovation and society will continue to be one of the major trends defining our future: a socio-technical driver at the heart of every aspect of our lives. It is therefore crucial to understand the extent to which collecting institutions have considered the strategic options that this trend might have on their service priorities and delivery mechanisms. Chapters Eight, Nine, Ten and Eleven seek to establish (from strategic documents and research between 2000 and August 2014) the scope of evidence of theory and practice that might demonstrate collecting institutions' understanding and application of strategic[83] planning and the innovative use of the Internet. Additionally, whether there are new collective actions to develop and present successfully a compelling case at national policy level.

[83] The Oxford English Dictionary defines the adjective as: "Relating to the identification of long-term or overall aims and interests and the means of achieving them". http://oxforddictionaries.com/ [accessed 17th December 2013]

Management tools such as three-year budget planning and zero-based budgeting, now often undermined by the need to cut budgets at short notice, tend to constrain long-term reflective thinking. Yet, in an age of rapid innovation and equally speedy diffusion across the mass market, survival may demand examination of radically new approaches to service management, development and delivery (Christensen, 1997, p2; Christensen and Eyring, 2011, p512). This review of strategic planning, research and innovation seeks to establish the degree to which collecting institutions are *genuinely* strategic about future possibilities and the extent to which they embrace the Internet. To give consistent meaning to these intentions they will be evaluated within the framework of a contemporary planning tool developed specifically to map systemic patterns of innovation and change.

7.3 THE THREE HORIZONS MODEL

The Three Horizons Model is a generic tool intended to create a *timescape* that describes future orientations based on what can be observed about the present (Selin, 2006). Those orientations may be used in narratives for both debate and reflection. The Model has been used in contexts ranging from organisational growth (Baghai, Coley and White, 2000, p274), research on a 50-year horizon for intelligent infrastructure for the Foresight Group (Hodgson and Sharpe, 2008), environmental and energy supply futuring (Curry and Hodgson, 2008) and public sector innovation challenges such as the future of the Scottish education system (Leicester, Bloomer and Stuart, 2009). The Table below contains an expression of the model:

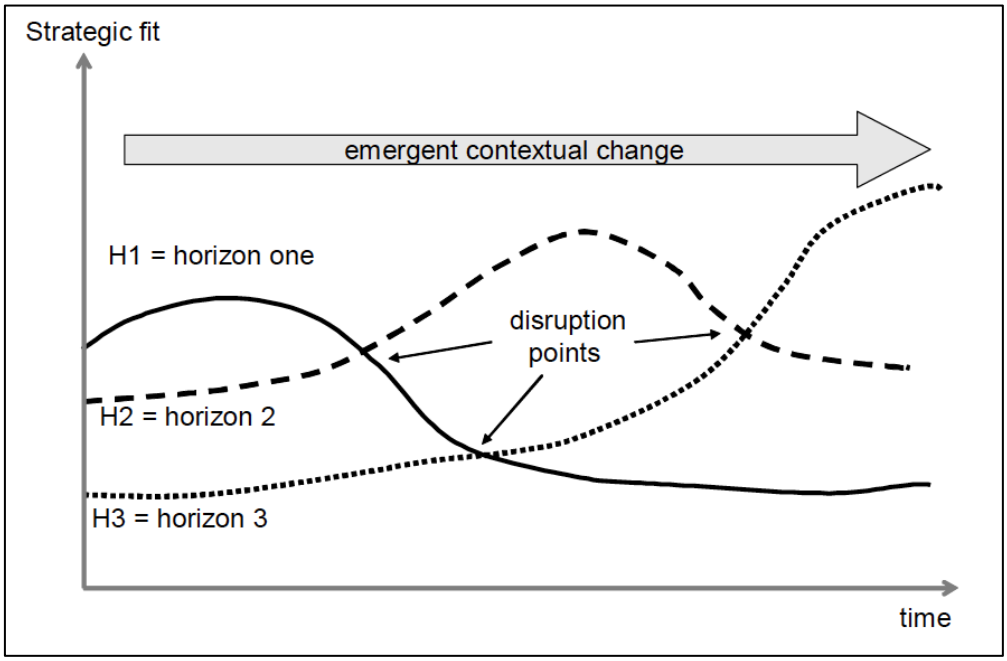

Table 7.2 *Three Horizons Model (with acknowledgements to Hodgson and Sharpe, 2008)*

The H1, H2 and H3 curves represent three separate horizons that have a relationship over time (the x axis). The y axis represents the state or *fit* of the phenomenon under consideration – organisational growth, social change, innovation and so on. The H1 curve represents the current orthodoxy in an organisation, business or social system: the status quo. The curve maps

activity change and innovation adopted and adapted to operate within prevailing priorities, processes and practices. Activity under this curve is generally described as *sustaining innovation*.

> "The first horizon describes the current way of doing things, and the way that we can expect it to change if we all keep behaving in the ways that we are used to." (Sharpe, 2013, p221)

H2 traces *transitional* or *disruptive* activities likely to create risks and opportunities that challenge the status quo, as described in Chapter Four. H3 represents new *transformative* forms that are the outcome of the interactions between the sustaining (H1) activity and H2 disruption. H3 is the future system: the new orthodoxy. The example of the recorded music industry described in Chapter 4.3.2 highlights the relevance of the model. The H1 status quo of the CD, disrupted by Napster and the iPod (H2) and transformed by iTunes (H3) (Naughton, 2012, p76).

The utility of the Three Horizons Model has little to do with the shape of the curves, but much to do with the relationships between them. For example within any particular topic, understanding the kinds of activities that define the H1 and H2 curves and especially the intersections defined in Table 7.1 as *disruption points* is crucial. These are the points where significant change may be observed. In Sharpe's words:

> "The Three Horizons is a spatial metaphor – it moves the process of change over time into a simple diagram in space on the page. It combines the notion of time moving from left to right with the idea of change as the interplay of the three horizons, moving from the dominance of the familiar to the emergence of the new." (Sharpe, 2013, p132)

The quest within Chapters Eight, Nine, Ten and Eleven, therefore, is to establish the extent to which both mindset and action show commitment to progression beyond the status quo:

> "The H2 mindset… looks at all potentials for change and seeks to harness them to introduce something new to the world that will grow and thrive. We call it Horizon Two to bring out that it lies beyond the first horizon, and so before it emerges it is only visible to those who participate in the H2 mindset." (Hodgson and Sharpe, 2008, p139)

7.4 STRATEGIC THINKING AND PLANNING FOR THE FUTURE

This section describes the overall approach to evidence gathering, filtering and analysis for the following four chapters, all of which focus on addressing the tasks associated with Research Objectives Four and Five. Where appropriate more detail is included at the beginning of individual chapters.

7.4.1 **SCOPE AND STRUCTURE OF CHAPTERS EIGHT, NINE, TEN AND ELEVEN**

Chapters Eight, Nine and Ten focus on analysis of strategic studies and planning tools published between 2000 and 2014; each of the chapters dealing with one of the three institutional forms. Document analysis is arranged in chronological order so that it is possible to identify any continuing/evolving themes. The twenty two strategic studies and planning tools that make up the three chapters are important in exploring the validity of the Research

Hypothesis since they should provide indicators of broad opinions about the future and the extent to which there are strategic planning tools that influence cadres of collecting institutions. This is a large body of material and for brevity extensive extracts and commentaries for the documents in each chapter are included in Appendices to each of the chapters, together with any supporting documents in sufficient detail to highlight the following issues:

- The stated purpose of the project/document.
- The evidential processes used in conducting the project.
- Identification of key features relevant to the Research Hypothesis:
    - Response to socio-technical impact of the Internet, now and in the future;
    - Centrality of the consumer in the future design and delivery of services;
    - The value of links between different collecting sectors;
    - The importance of shared national strategic direction.
- Evidence of subsequent actions or research arising from the project report.

Each of the documents in Chapters Eight, Nine and Ten include a summary table that will enable, in Part Three (Chapter Thirteen), comparison of a scorecard of key features across all 22 documents. The topics and the range of possible responses are included in the Table below:

STUDY TYPE	• **Strategic study** • **Strategic study plus development plan** • **Futures study** • **Other** (Toolkit/guidance note, advocacy document, etc.)
SCOPE	• **Institution type** • **Geographic scope**
INNOVATION TYPE	• **H1**: **Sustaining innovation** that maintains the existing orthodoxy; the status quo • **H2: Disruptive/transitional innovation** likely to create risks and opportunities that challenge the status quo • **H3: Transformative forms** arising from the interaction of H1 and H2; the new status quo
KEY FEATURES RELEVANT TO THE RESEARCH HYPOTHESIS	
Response to socio-technical impact of digital technologies and the Internet, now and in the future	OPTIONS **0** = no mention **1** = passing mention **2** = priority **3** = main focus in document
Centrality of the consumer in the future design and delivery of services	
The value of links between different collecting sectors	
The importance of collective strategic direction	

Table 7.3 *Topics for strategic documents scorecard*

This process of evaluation is, of course, interpretive, based on a reading of the texts. However, to provide consistency, the preparation of each of the document summaries was only undertaken once all documents had been analysed and compared.

Chapter Eleven considers research literature on service innovation in collecting institutions since 2000. The chapter opens with a separate review of the literature for each of the institutional forms, followed by literature examining co-operation between museums, libraries and archives and a section that analyses exemplar innovation in the outer world with projects within and between the inner world of collecting institutions. This latter section uses the Table 7.3 scorecard's four key features to assess and compare both inner and outer world projects.

7.4.2 DOCUMENT DISCOVERY

The search approach described in section 3.3.2 was applied leading to the discovery of 290 relevant documents. Many of the strategic studies and planning tools were already held in the researcher's local databases, along with a range of supporting material. Any supporting documents cited in these strategic documents were traced to ensure a full picture of scope and intentions. The wider search using UCL's Explore Service used the following terms: vision, future, 21st century, scenarios, Delphi, trends, education[84], purpose, innovation; (separately for museums, libraries and archives). The Library and Information Science databases plus the Museums Association's extensive archive of material in Museums Practice and Museums Journal were also used extensively to trace new material.

7.4.3 FILTERING AND SYNTHESIS

The 290 documents identified all fitted into the three categories described above. The form, selection and filtering of these is described below:

- **Strategic studies about the long-term future of collecting institutions:** A range of practical tools is now available to support futures studies, ranging from structured consultation of experts on their views of the future (Delphi Technique), reviewing trends over time to make judgments about their future effect (trend analysis), environmental scanning and through the application of such tools, the creation of possible scenarios of possibilities at some stage in the future (scenario and simulation planning). Inclusion required that the study covered a cadre of institutions; the three analysed in Chapters Eight and Nine deal with public libraries, academic libraries and museums. Such studies focused on a single institution would extensive additional work establish their relevance to a wide constituency of institutions.
- **Strategic planning tools** providing 3-5 year development plans covering an institutional sector within one or more of the UK Home Nation jurisdictions, the majority coming from government departments or other public agencies. As with strategic studies documents relating to only one institution were not included due to the difficulties of establishing wider relevance.
- **Studies about the future of service innovation in relation to the use and impact of the Internet**. The third category must be approached with more caution not least because it makes up the largest group of items found. It is a category that includes

[84] For museums the search term used was museum training since the term museum education is generally used to describe a delivery activity within museums

case studies of innovative practice, reflective and opinion pieces ranging from the possibilities of particular forms of technologies to the long-term implications of digital innovation, user studies and papers guiding the use of techniques such as scenario planning.

The guiding principle for the selection of material for inclusion in Chapter Eleven is based on their alignment with any or all of the *innovation categories* and *key features* presented in Table 7.3 and summarised in Table 11.2. The synthetic process of aggregating the wide ranging evidence revealed is driven by the use of the scorecard which is used across all four of the chapters.

CHAPTER EIGHT
Libraries: Strategic Approaches to Service Development

8.1 DOCUMENTS REVIEWED

	Title	Lead Body	en	ni	sc	wa	uk
2003	Framework for the Future	Department for Culture, Media and Sport (DCMS)	✓				
2006	Delivering Tomorrow's Libraries	Department of Culture, Arts and Leisure (DCAL)		✓			
2009	Modernisation Review of Public Libraries	Department for Culture, Media and Sport	✓				
2010	Academic Libraries of the Future	Jisc, British Library, RIN, RLUK, SCONUL (Curtis)					✓
2010	Libraries Connecting People and Communities: Policy Briefing	Scottish Library and Information Council (SLIC)			✓		
2011	Culture, Knowledge and Understanding: Great Museums and Libraries for Everyone	Arts Council England (ACE)	✓				
2012	Libraries Inspire: Strategic Development Framework for Welsh Libraries: 2012-16	Museums, Archives, Libraries Wales (CyMAL)				✓	
2012	A New Chapter: Public Library Services in the 21st Century	Carnegie UK Trust (CUKT)					✓
2012	Envisioning the Library of the Future	Arts Council England	✓				

Table 8.1 *Strategic studies and planning documents on libraries*

NOTE: Extensive extracts and additional information for each of these documents are included in the Appendices to this Chapter.

8.2 FRAMEWORK FOR THE FUTURE

Framework is a report from the Department for Culture, Media and Sport (DCMS, 2003[85]). Its subtitle - "Libraries, Learning and Information in the Next Decade" implies a trajectory of development well beyond the normal planning cycle of three to five years. While it uses the word "libraries" it is actually focused solely on public libraries; DCMS's mandate was then and remains today oversight of public libraries in England. The Forward by the Minister for the Arts summarises the reasons, nature and intentions of the report:

> "Framework for the Future is a long-term strategic vision for the public library service, which has been put together following extensive consultation…The proposals are presented as a framework to encourage imaginative innovation and greater operational effectiveness and efficiency… The public library community has asked for clear guidance and leadership and we have responded" (DCMS, 2003, p5).

Framework is more strategic plan than futures study. Its point of departure is that the future of England's public libraries will be built on their "historic strengths" and identified "future potential"

[85] Additional information in Appendix 8.1

(DCMS, 2003, p14). Key concerns focus on organisational matters: service fragmentation across 149 local authorities, lack of national advocacy, tensions between national and local governments and the falling demand for public library services. The report sets out three themes that should form the basis for a future shared vision (DCMS, 2003, p23):

- Books, reading and learning;
- Digital citizenship;
- Community and civic values.

Each of these themes is considered through an assessment of what public libraries are already doing – with good practice case studies – and suggestions for developing these concepts further as part of the long-term strategy. Priorities included increasing awareness of the value of public libraries across local and national government and stronger sector leadership at national and regional levels. These to be delivered by Resource (precursor to the Museums, Libraries and Archives Council), through the creation of a three-year Library Development Plan covering development of the People's Network and common ICT standards, creating fundraising and business development strategies, and building regional capacity for co-ordination. DCMS would work to raise the profile of public libraries across national government and develop better tools for performance assessment.

Framework aims to define a clear development strategy for the future rather than explore *possible* futures. It places emphasis on the existing structures and practices and examines the means to make them more efficient and effective. This is very much H1 activity. The report addresses the evolution of digital developments as a key component of the vision for libraries through the People's Network. It could be argued that the People's Network project was one of the few examples of H2/H3 activity to be found in collecting institutions (Batt, 2009b). The installation of tens of thousands of public access PCs in thousands of UK public libraries across the turn of the Millennium was at once disruptive and transformational. It both reformulated a key strand of practitioner activity, providing ICT training to all staff in public libraries, and created a new and vital role for public libraries at the cutting edge of the digital revolution. **Framework** builds on that dramatic change in its digital recommendations.

The strength of the report comes from the clarity with which it defines three key themes for the future national development of England's public libraries; themes that have continued to remain relevant across the ten years since it was published, providing a foundation for subsequent government reports. More specifically, the creation and delivery of the Leading Modern Public Libraries programme (LMPL) enabled senior managers in all England's public libraries to undertake an extended programme of leadership and development training:

> "The LMPL programme was clearly a success at the Heads of Service and Senior Managers levels…the programme has made a substantial contribution to meeting the aims of the 'Framework for the Future'" (Streatfield et al, 2007, p9).

FRAMEWORK FOR THE FUTURE	Study type	Scope	Innovation type
	Strategic study + development plan	Public libraries England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	1	0	3
See Table 7.3 for details of scoring methods			

8.3 DELIVERING TOMORROW'S LIBRARIES

Published by the Department of Culture, Arts and Leisure in 2006 (DCAL, 2006[86]), **Delivering Tomorrow's Libraries** is a policy framework for the development of public libraries in Northern Ireland. It had a relatively long gestation period, having originated as a review of the future vision for public libraries set up by DCAL in 2001. The final policy framework is the outcome of a range of consultation processes:

> "During the consultation phase of 'Framework for Change', the then Minister held a series of meetings with political parties and with Education and Library Boards. Two public meetings also took place. When the consultation ended on 31 January 2006, over one hundred organisations or individuals had written or emailed their views, and nearly one thousand people made an on-line submission from a library computer" (DCAL, 2006, p6).

In similar vein to **Framework** (DCMS, 2002), **DTL**'s vision is for evolutionary progress of the traditional model of the public library. It cites the IFLA/UNESCO Manifesto definition[87]: "the public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision-making and cultural development of the individual and social groups", and identifies five core policy agendas (DCAL, 2006, p8):

- Lifelong learning, formal and informal;
- Addressing social exclusion and inequality;
- Facilitating development of informed and responsible citizenship;
- Building communities and fostering good relations;
- Promoting creativity.

Specific mention is made of the **Framework** message that while the traditional role of the public library should remain; "…it must be harnessed and developed most effectively to meet the needs of the twenty first century" (DCAL, 2006, p8). DCAL presents its vision for Northern Ireland's public library service as follows:

> "A flexible and responsive library service which provides a dynamic focal point in the community and assists people to fulfill their potential." (DCAL, 2006, p9)

[86] Additional information in Appendix 8.2
[87] IFLA website. Available at: http://www.ifla.org/publications/iflaunesco-public-library-manifesto-1994 [accessed 26th January 2014]

The major element of **DTL** is a section entitled "achieving change" that summarises a range of development priorities under the headings customer focus, targeted support and innovation, and efficiencies. Descriptions within these sections are quite general. For example, the main reference to the need to respond to the emergent Network Society is:

> "There is an increasing need to create and deliver a 'virtual library' service using developments in communication technology and a digitisation programme. People are changing how they access information and the library service should be able to meet their needs in the way and at a time that suits them." (DCAL, 2006, p13)

This leaves a great deal to the imagination given that no detailed action plan is included within the report. On the other hand, by 2006 the five Education and Library Boards in Northern Ireland had integrated all digital developments (back office and customer facing) so that a consistent approach across Northern Ireland might be easily facilitated once agreed:

> "Access to computers and internet under the ELfNI project has been a highly successful development and includes adaptive technology to meet the needs of people with a range of disabilities." (DCAL, 2006, p15).

The report concludes with a section dealing with the development of a standards regime and funding formula for public libraries.

Both in terms of content and in terms of form, **DTL** resonates with **Framework**. It does not contain the worked through action plan of the latter, but it does echo the vision of a steady evolution of the public library service around a traditional model. It certainly is not a futures study and in terms of its vision statement for public libraries it offers the opportunity for many different interpretations. The report presents a future that sits within the H1 curve of the Three Horizons Model and while both digital innovation and widening partnerships are referred to, it does not draw out the key challenges and opportunities that they offer. However, the structural arrangement of public libraries in Northern Ireland changed significantly in April 2008 with the integration of the five former library services into a single body - LibrariesNI[88]. The current corporate plan and annual business plan for LibrariesNI[89] reflect closely the vision and evolutionary approach of **DTL**. Organisationally this integration is a significant disruption of the status quo and the effects of scale and integration might, in time, facilitate the testing of new approaches to service (H2/H3 activity).

[88] LibrariesNI website. Available at: http://www.librariesni.org.uk/Pages/default.aspx [accessed 26th January 2014]
[89] LibrariesNI website, plans and performance. Available at: http://www.librariesni.org.uk/AboutUs/OurOrg/Pages/Plans-and-Performance.aspx [accessed 26th January 2014]

DELIVERING TOMORROW'S LIBRARIES	Study type	Scope	Innovation type
	Strategic study	Public libraries Northern Ireland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	1	0	3
See Table 7.3 for details of scoring methods			

8.4 MODERNISATION REVIEW OF LIBRARIES PROGRAMME

To read the introduction to the consultation document **Empower, Enrich, Inform** (DCMS, 2009) that preceded the final report of DCMS's 2009/10 Modernisation Review (DCMS, 2010[90]), is to recall some of the questions that are raised in the Introduction to this thesis concerning the future role and relevance of collecting institutions in the Network Society. The document sets out five significant challenges for the English public library service:

- "How can we reverse the current trend of decline in library usage and grow the numbers using the library service?
- How can the library service respond to limited public resource and economic pressures?
- How can all libraries respond to a 24/7 culture and to changing expectations of people who want immediate access to information?
- How can all libraries grasp the opportunities presented by digitisation?
- How can the library service demonstrate to citizens, commentators and politicians that they are still relevant and vital?" (DCMS, 2009, p4)

Certainly the last three of this list are issues at the heart of this research. The Introduction to **Empower** makes clear that the world has changed significantly since the publication of **Framework** six years earlier:

> "Changes in consumption and customer expectations mean that people are used to free and instant access to information on multiple platforms, in the home, at work and 'on the go'…The average person now spends 30 hours a week on the Internet with 99% of children between 8 and 17 using the Internet." (DCMS, 2009, p4)

The publication of such a consultation document is an important mechanism to define the scope of the research and **Empower** is particularly interesting for having 28 reflective essays from a range of stakeholders – practitioners, policymakers, publishers and booksellers and other interested parties from the service sectors (including Starbucks) and communities. There is, of course, a wide spectrum of opinion, but there are a number of themes concerning, for example, national direction for digital services and support for learning, both formal and informal, that appear again and again. Together with some searching questions on structures and digital developments the consultation document laid out a big landscape for comment and discussion.

[90] Additional information in Appendix 8.3

The final report following the consultation process - **The Modernisation Review of Public Libraries: A Policy Statement.** (DCMS, 2010) – was published in March 2010 and contains 54 recommendations addressed under six aims (DCMS, 2010, p5 et seq):

- To drive the quality of all library services to the level of the best.
- To reverse the current trend of decline in library usage and grow the numbers using the library service.
- That the library service is able to respond to limited public resource and economic pressures.
- To ensure all libraries respond to a 24/7 culture and to changing expectation of people who want immediate access to information.
- That all libraries grasp the opportunities presented by digitisation.
- To demonstrate to citizens, commentators and politicians that libraries are still relevant and vital.

Each of these aims is addressed in a chapter that includes details of actions to be undertaken by government, local authorities, practitioners and other agencies to deliver the recommendations (the headlines for these are included in Appendix 8.3). Those headlines make clear the broad sweep of areas that the Policy Statement covers. In her Introduction – "A Vision for Public Libraries" - the Minister of Culture acknowledged that the vision was built on the foundation of **Framework**, and it is certainly true that the earlier document defined for the first time a set of activities and responsibilities that should apply across the whole of the public library service in England. It is not unreasonable to suggest that the **Modernisation Review** is much closer to a blueprint for a *national* public library service. The fact that within months a new government was in place and pressure on public expenditure following the financial crisis increased, reduced significantly the impact of the Review on future public libraries policy. Appendix 8.3 summarises the key actions that were initiated first by the Museums, Libraries and Archives Council and subsequently by Arts Council England.

At one level the **Modernisation Review**, like its predecessor **Framework**, defines a future that is H1 within the Three Horizons Model. It sustains and builds on what is already happening – an evolutionary vision. At a synoptic level, a number of recommendations, had they been implemented, would certainly have disrupted the status quo. Examples include:

- A Library Offer to the Public (recommendation 1): "The Government recommends a Library Offer to the public for all public libraries in England." (DCMS, 2010, p5)
- Governance and delivery models (recommendation 14): **"**All library authorities should consider innovative ways to generate improvements and efficiencies through shared services, partnership working, new delivery models and new governance arrangements." (DCMS, 2010, p9)
- A national consortium for digital innovation (recommendation 39): **"**The strategic body for libraries will bring together a national consortium of stakeholders including technologists, publishers, librarians, local authorities and academics to develop a digital innovation strategy for public libraries." (DCMS, 2010, p11)

Some of the recommendations have been pursued through voluntary co-operation[91], or indeed, the necessity of saving money, yet the core intention of the Review to define and bring about collective national strategic direction remains an aspiration.

MODERNISATION REVIEW OF LIBRARIES	Study type	Scope	Innovation type
	Strategic study + action development plan	Public libraries England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	2	0	3
See Table 7.3 for details of scoring methods			

8.5 ACADEMIC LIBRARIES OF THE FUTURE

Academic Libraries of the Future (Curtis, 2011[92]) is a marked contrast to the vision supported by a body of practical actions at local and national level that is DCMS's **Modernisation Review**. **Academic Libraries of the Future**[93] is a futures study intended to examine a range of possible scenarios 20 years ahead, based on scans of the external environment in which academic libraries operate and discussions with practitioners and policymakers. Given the diversity of factors considered and the varied effects and interactions that are possible 20 years in the future it is not easy to draw any generic conclusions, but then the process is not intended to achieve a particular set of service or policy outcomes in the way that all of the other documents aspire to in this chapter. Each scenario presents a very different view of the future and each proposes significant changes in structures, relationships and the nature of the future academic. In brief here:

> **"Wild West Scenario**: The world is dominated by capitalism and corporate power, including the HE sector…The power lies in the hands of the consumer ('student' being a rather old-fashioned term) who is able to pick and choose from courses and learning materials to create a personal educational experience… The pattern is of fragmentation, specialisation and reconfiguration with no single model dominating... In 2011 a librarian is someone who works in a library. Beyond 2020, it is difficult to define a common group of librarians who share a common set of skills and values…"
>
> "The **Beehive Scenario** is a world in which the state is the primary funder and controller of HE. Its overriding aim is the production of a skilled workforce, and to this end it has created a largely homogenous HE system for the masses while allowing the elite to attend the few traditional universities…. The concept of a library has undergone radical change. The move to digital resources has allowed the separation of knowledge, information and learning support services from the provision of space for teaching and learning. The provision of knowledge, information and learning support services is largely

[91] For example the Society of Chief Librarians' Four National Offers for Public Libraries press release. Available at: http://www.goscl.com/libraries-of-the-21st-century-scl-launches-four-national-offers-for-public-libraries/ [retrieved 31st January 2013]
[92] Additional information in Appendix 8.4
[93] Sponsored by the British Library, Jisc, Research Information Network (RIN) and Research Libraries UK (RLUK)

aligned with the HEI hub and spoke model in the UK."

"Walled Garden Scenario: A Walled Garden is an oasis, shut-off from the outside world. Inhabitants of the garden neither know, nor care much about the world beyond the garden's comforting walls…HEIs in this scenario are 'Walled Gardens'. They are insular and inward-looking, isolated from other institutions by competing value systems. Provision of information services in this world is as much concerned with protecting their own materials for others as it is in enabling access… In this fragmented, competitive world, 'libraries' are aligned to individual institutions, or networks of value systems; library services are available at a sector level only for the publicly-funded minority of institutions." (Curtis, 2010, p11).

Embedded within the scenarios and the commentary contained in the final report of the project are issues associated with the Internet, external factors and national strategic direction; it is the first two of these that define much about the long-term future from which it is possible to derive forms of strategic direction. The purpose of futures studies is to examine factors that might have H2/H3 effects shifting fundamentally the H1 model. In that regard the **ALF** scenarios highlight the importance of sustaining activity and debate to understand how future uncertainties might be dealt with. The final report contains a range of recommendations for action at sector, institutional and library levels, but it has been impossible to track down any evidence that the study has produced significant effect or programme of work (Curtis, 2011). This emphasises the need to embed scenario planning in a broader programme that encourages reflection and experiment.

SUMMARY			
ACADEMIC LIBRARIES OF THE FUTURE	Study type	Scope	Innovation type
	Futures study	University libraries United Kingdom	H2/H3
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
3	3	2	2
See Table 7.3 for details of scoring methods			

8.6 LIBRARIES CONNECTING PEOPLE AND COMMUNITIES

This is a policy briefing published by the Scottish Library and Information Council (SLIC, 2010[94]). It is neither futures study nor strategic plan, rather an advocacy document promoting the value of all Scotland's libraries. It articulates what libraries do, their value and how policymakers can support the development of libraries in the future. The significance of the document is that it forms the foundation of the **SLIC Strategic Plan 2011-2014** (SLIC, 2011). SLIC is a membership organisation that represents libraries at national and local government levels. It has developed a widely used quality assessment package for Scottish public libraries (SLIC, 2014), but also plays a key role of co-ordination. Therefore, while SLIC may not be able

[94] Additional information in Appendix 8.5

to direct national strategy, its roles as co-ordinator and agent of liaison means that it is able to facilitate national priorities on behalf of its members. The Strategic Plan had five headline priorities (SLIC, 2011, p4 et seq):

- Improve services through joint and cross sectoral initiatives.
- Support digital initiatives, promoting the role of library and information services in all sectors.
- Demonstrate the value of co-ordination, collaboration and co-operation
- Provide a focus for knowledge sharing and the development of user-centred services; co-operate and collaborate with other relevant UK agencies where appropriate.
- Promote co-operation and collaboration across all sectors of the library and information community and related organisations to encourage co-ordinated service development.

Libraries Connecting People is neither the practical vision and action plan of DCMS's **Modernisation Review**, nor the long-term, open-ended vision of **Academic Libraries of the Future**. Nevertheless it presents a set of priorities for national strategic direction and identifies priorities within the **Strategic Plan** that encourage wide co-operation and digital innovation. Its approach is H1 since there is no suggestion of disruption to current practices.

LIBRARIES CONNECTING PEOPLE	Study type	Scope	Innovation type
	Other (Strategic advocacy tool)	Libraries Scotland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	1	1	3
See Table 7.3 for details of scoring methods			

8.7 CULTURE, KNOWLEDGE AND UNDERSTANDING: GREAT MUSEUMS AND LIBRARIES FOR EVERYONE

In April 2011, Arts Council England (ACE) took over responsibility for the strategic management of museums and public libraries in England. **Culture, Knowledge and Understanding** (Arts Council England, 2011a[95]) was published as a position statement examining priorities for museums and libraries against the pre-existing ACE document **Achieving Great Art for Everyone** (Arts Council England, 2010). The document presents five ten-year generic and open-ended goals defining a framework for development programmes for museums and libraries (Arts Council England, 2011a, p18 et seq). The goals cover:

- Excellence;
- More people experiencing museums and libraries;
- Sustainability, resilience, innovation;
- Leadership and skilled and diverse workforce;
- Every child and young person having the chance to experience museums and libraries.

[95] Additional information in Appendix 8.6

As a position statement the document avoids specific tasks or deliverables, focusing on broader aspects of engagement, support and guidance. There is a section that describes some short to medium term tasks for the libraries agenda, carrying forward the existing Future Libraries programme (one of the outcomes from the DCMS **Modernisation Review**, [DCMS, 2010]), and working with the Local Government Group to identify key pressures for public libraries and authorities where best practice arising from the Future Libraries programme might be implemented (MLA, 2011a). The other relevant matter in the short to medium term activities is a commitment to investigating the extent to which it is possible to encourage "collaboration between museums, libraries and arts organisations, exploring the opportunities that can be grasped through an integrated approach" (Arts Council England, 2011a, p33).

Culture, Knowledge and Understanding does not describe a vision for the future and neither does it provide a detailed action plan for change and development, picking from the 54 recommendations in the **Modernisation Review***,* for example. Nevertheless, the five goals provide an indication of the approach to be taken by the new strategic body for England's public libraries. In addressing the areas of interest to this research it has very little to say about the Internet, but does provide indicators of the nature of any future national strategic engagement that might take place. Its focus is certainly H1 rather than H2/H3 in the Three Horizons Model.

CULTURE, KNOWLEDGE AND UNDERSTANDING	Study type	Scope	Innovation type
	Other (Strategic framework)	Public libraries England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
1	1	2	2
See Table 7.3 for details of scoring methods			

8.8 LIBRARIES INSPIRE: STRATEGIC DEVELOPMENT FRAMEWORK FOR WELSH LIBRARIES 2012-16

As a division of Welsh government CyMAL directs policy on behalf on the government. **Libraries Inspire** (CyMAL, 2012[96]) is the second four-year strategic planning framework for all types of libraries within Wales. This single document lays out purposes and deliverables for the planning cycle. It presents a national library core offer that underpins the delivery of the plan. The offer encompasses both public and educational libraries addressing service accessibility, customer service, online access to information 24/7, trained staff, attractive spaces, partnership to open up Welsh resources and the need for regular consultation with users. For public libraries this offer is made more rigorous by a framework of standards and performance indicators that have been used for a number of years. The latest (fifth) edition covers 2014-17 and lays down specific standards covering all aspects of service. Those relating to digital

[96] Additional information in Appendix 8.7

technologies include the ratio of public terminals to population size, access to services 24/7, hardware renewal cycles, the provision of wifi, scanning and printing and support to use the technology (CyMAL, 2014). These are services to be found in all but a few public libraries across the UK. The combination of strategic plan and standards that operates in Wales, however, provides mechanisms for both defining collective development and regularly assessing progress in ways that are not found elsewhere in the UK. **The Modernisation Review** (DCMS, 2010) proposed similar arrangements for English public libraries, but they were never adopted.

Within **Libraries Inspire** there are a number of development strands focusing on service sustainability in both public and academic libraries through greater collaboration and on digital activities, much of which will be led by the National Library of Wales:

- "To ensure that libraries work together to provide high quality resources, including interlibrary loans, that meet the needs of their community.
- With museums, archives, other services and the public to create new bilingual digital content that will be freely available on the Web.
- To develop a national online reference library service for Wales. This work will be led on behalf of Welsh libraries by the National Library of Wales.
- To enable public libraries to pilot new e-services such as e-books and music downloads to meet the changing needs of people.
- To further develop the all-Wales library portal librarywales.org and services such as CatCymru and Ask Cymru. This work will be led on behalf of Welsh libraries by the National Library of Wales" (CyMAL, 2012, p23).

Libraries Inspire is not a long-term planning tool presenting options. Like other strategic plans that have been reviewed, it is a tool to provide clarity and collective certainty about the medium term. Again, like other plans, it operates within the H1 space of sustaining innovation rather than engaging with disruptive change. Despite that, the processes being followed in Wales are important to an understanding of approaches to service transformation. Its engagement with all types of library and the commitment to work across all collecting institutions (see bullets one and two above) embedded in a national development plan may give some early indications of the value of all collecting institutions working together within a shared framework for digital innovation. It should be noted that the profile of public libraries remains high within the Welsh Government with the publication, in July 2014, of a report from the National Assembly of Wales' Communities, Equality and Local Government Committee on the future roles and priorities for Welsh public libraries. The report recommends action by Government to clarify purpose, increase the role of libraries in community development and provide more guidance on the use of volunteers in libraries (National Assembly for Wales, 2014).

LIBRARIES INSPIRE	Study type	Scope	Innovation type
	Strategic study + development plan	Libraries Wales	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	2	2	3
See Table 7.3 for details of scoring methods			

8.9 A NEW CHAPTER: PUBLIC LIBRARIES IN THE 21ST CENTURY

This Carnegie UK Trust (CUKT) study embraces public libraries across the whole of the UK and also includes the Republic of Ireland. It focuses on two strands of data: statistical and other evidence on the public library sectors in the five separate 'jurisdictions' covered by the report, and survey questions on attitudes to public libraries in an omnibus survey of 1000 people in each jurisdiction (Macdonald, 2012, p3[97]). Ipsos MORI supported CUKT in the data gathering and analysis. The report contains a useful summary of government policy in the Home Nations and Ireland and identifies three key challenges that public libraries currently face (Macdonald, 2012, p7):

- The implications of cuts in public spending;
- The public sector reform agenda;
- The impact of new technology and digital services.

These three challenges open the chapter Current Challenges and Opportunities and each is considered through a summary of the current situation. The section on new technology identifies four ways in which opportunities are possible (Macdonald, 2012, p19):

- They introduce new ways in which people can access knowledge and reading for leisure, for example using smartphones and eBooks.
- They allow libraries to provide their services in new ways, for example using self-service machines for issuing and returning books or providing online reference facilities.
- They provide an opportunity for libraries to play a key role in promoting access to IT and the digital economy more generally.
- They can support greater efficiency in the way the service is provided, and make it easier for library authorities to share functions and services.

This section draws on a number of earlier studies on the use of ICT in libraries and the identified potential benefits. It has nothing to say about potential (or actual) threats and opportunities. The following chapter – Public Views on and the Use of Libraries – draws on data from the public surveys and is a rich analysis of patterns of library use, expectations and priorities. The chapter offers considerable utility to service planning in the presentation and interpretation of data. It highlights the typical characteristics of those most likely to use the public library – people with children, prolific readers – and also provides interesting insight on the factor that users believed

[97] Additional information in Appendix 8.8

most likely to encourage increased use – providing more information on library services (Macdonald, 2012, p34). The process of synthesis of evidence follows – Towards a Shared Vision of the Library Service of the Future. This opens with five questions about the future of public libraries. The first of these questions, "what is the library service for in the 21st century" is answered with the following core aims (Macdonald, 2012, p41):

- Support for reading and learning;
- Information and advice about a wide range of services and issues;
- Support lifelong learning;
- Access to IT;
- Information and digital literacy by supporting and facilitating access to IT;
- Space for community activities.

The chapter continues with a resumé of possible approaches to service structure, justification of universality, entitlements, core service offers, community engagement, the value of clear links to national policy and the role of library practitioners, garnered from the evidence on previous chapters. Attention is drawn to the ongoing problem of establishing effective leadership in each of the jurisdictions. The report's conclusions begin with a caveat:

> "Our research may reflect a traditional view of what libraries are for. People who do not currently use public libraries regularly are probably unaware of some of the services available, or of some of the new ways in which services are provided, such as online reference facilities which are available 24 hours a day" (Macdonald, 2012, p55).

…and follows with a summary SWOT analysis (Macdonald, 2012, p56):

strengths	weaknesses	opportunities	threats
Extensive network of premises	Many premises require modernisation and refurbishment	Capacity to contribute to digital participation	In prioritising services for cuts, libraries may be fairly low on the agenda
Many spacious premises with room for other services to be provided or developed	Not closely aligned to national policy	Capacity to contribute to achieving wider social goals	Falling levels of use make it easier for local authorities to cut services
Qualified staff	Difficult to develop responses to public spending cuts without more shared services and cross-authority activity	Capacity to contribute to education policy, information literacy and other types of literacy, e.g. health literacy.	
	Premises may be intimidating to some excluded groups		

Table 8.2 *Carnegie UK Trust SWOT analysis of public libraries future*

The conclusions also include a series of specific statements and proposals for public libraries that build on the strengths and opportunities in the above Table. These are included in Appendix 8.8.

A New Chapter like a number of the studies and strategies considered so far presents a future public library service across the UK and Ireland that builds on the traditional model of the public library; an evolving status quo. Indeed, Chapter Two – the Changing Context – in addressing the purpose of public libraries in the 21st century opens with a reminder of Carnegie's original purpose in establishing public libraries:

> "When Andrew Carnegie made grants to libraries at the start of the 20th century, he described libraries as 'instruments for the elevation of the masses of the people'. They were seen as providing access to learning and advancement for people who would otherwise have limited opportunities for education or self-improvement. Their purpose was clearly educational, and they were open to everyone in a community who wanted access to books and to learning." (Macdonald, 2012, p5)

It then makes the point that contemporary public libraries retain the characteristics of universality, and access to books and learning in the face of challenge and change, placing the future of public libraries within the H1 sustaining innovation category. The real strength of the Report is to underpin this argument with a wide range of evidence drawn from institutions and from users and non-users. It does that across the five jurisdictions in such a way that it is possible to draw comparisons and different approaches to service provision, making it a uniquely useful document. It is less comprehensive in defining the threats that face public libraries as a result of the rapid socio-technical changes brought about by the Internet. The SWOT analysis above (Table 8.2) lists only two threats, none to do with the emerging Network Society. Neither does the list make specific mention of the lack of sector leadership, although articulated in the Report:

> "One of the challenges facing libraries is that they are essentially a local service. Unlike education or housing services, which local authorities provide within a clear national policy context, there is less national policy or leadership for public libraries." (Macdonald, 2012, p49)

Issues of policy and direction are listed in the conclusions and proposals and, to be fair to the work of CUKT, as a third sector agency one of their strengths is the ability to question and challenge. Within the UK's fragmented library landscape this is an essential role. Additionally, Network Society issues and lack of leadership remain potential threats although not addressed in the report. During 2013, the CUKT website reported support for national visions and strategies particularly in Scotland[98]. More recently it has published an advocacy tool based on evidence from libraries on the impact of public libraries on wellbeing (CUKT, 2014).

[98] CUKT Website. Available at: http://www.carnegieuktrust.org.uk/changing-minds/knowledge---culture/the-future-of-libraries [accessed 22nd January 2014]

SUMMARY			
A NEW CHAPTER FOR PUBLIC LIBRARIES	Study type	Scope	Innovation type
	Strategic study	Public libraries UK and Ireland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
2	2	0	3
See Table 7.3 for details of scoring methods			

8.10 ENVISIONING THE LIBRARY OF THE FUTURE

Early in 2012 Arts Council England (ACE) commissioned Shared Intelligence and Ipsos MORI to:

> "…carry out a research project which would stimulate a strategic and future-focused debate on public libraries, encourage fresh thinking, and pave the way for more detailed exploration of how the public value libraries." (ACE, 2012b, p8[99])

The study was undertaken in three phases (Arts Council England, 2012b):

- **Environmental scan and trend analysis** to identify trends most likely to impact public libraries in the coming 10 years. Library experts were consulted and an online Delphi exercise conducted together with an assessment of the nature and scale of library innovation.
- **Consultation with library stakeholders** on the implications of trends for the library of the future – five open space workshops using four scenarios for 2022; plus a workshop with ACE staff.
- **Public focus groups** on the purpose and value of public libraries.

The processes, outcomes and conclusions of phases one and two were reported separately from the results of the public consultation process (Arts Council England, 2012d). The environmental scan was reported in detail at the five stakeholder workshops using the four scenarios to encourage participants to consider the effect of the different scenarios on the role and nature of the public library. The scenarios were, therefore, a stimulus for debate rather than worked-up end states of libraries in 2022, as was done in the **Academic Library of the Future** scenarios. The workshop scenarios focused on persona located within particular socio-technical and political environments (For Richer or for Poorer, This Digital Life, Off the Grid, a Fresh Start).

The Report phases one and two identified changing patterns of demography – ageing and more ethnically diverse – financial constraints, increasing localism and the socio-technical effects of the Internet (Arts Council England, 2012d, p11):

[99] Additional information in Appendix 8.9

- Public services face changing consumer behaviour with more demand for choice, power, 24-hour access, and personalisation, often exercised through online activity and comparison.
- Longer working hours, accelerated by always connected technology – resulting in genuine 'down-time' being seen as a precious commodity to be used wisely.
- Technology, especially the continued rise of handheld and mobile devices, in sheer numbers and breadth of usage.
- A growing digital divide impacting the poorest, oldest and least well-educated segments of the population.
- Huge changes in how we consume and interact with information, from how we communicate and interact with knowledge and media, to our reading habits and literacy levels.

A number of key issues came out of the workshops including the challenges of innovation:

> "…what the open space discussions highlighted is that (in this country at least) overall innovation in libraries is limited, and even when one library service has developed something new which works, adoption by others is very slow". (Arts Council England, 2012d, p19)

The social purpose of the public library; what should libraries be doing in the future:

> "At the workshops we heard many views about *what* libraries must do in the future. But although there was some discussion about *why* (i.e. fundamental purpose and ethos), this seemed harder for stakeholders to articulate..." (Arts Council England, 2012d, p21)

The report on phases one and two concludes with a number of points of importance to the future of public libraries relevant to this research (Arts Council England, 2012d, p21 et seq):

- That it is possible to identify a core purpose that might be valid for the next 10 years.
- The core purpose may stay the same; the libraries will have to respond much more quickly to technological and social change. The core purpose may be discharged in very different ways.
- Waiting for people to come to the library for learning, information, books and knowledge will not be enough. They will have to be proactive and reach out, engaging with communities, helping them to help themselves.

Phase three of the study, the public consultation, was reported in a second research report (ACE, 2012c). The report, which resonates with some aspects of the consultation results obtained from the CUKT survey, includes a series of headline issues and concerns that were raised during the discussion groups (Arts Council England, 2012c, p4 et seq):

- Importance of the library space, including its look, feel and purpose;
- Value of libraries to children and young people;
- Role of libraries in collecting and offering a gateway to knowledge and culture (collecting knowledge and culture);
- Inclusivity of libraries and their role in social opportunity and equality;
- Tension between change and opportunity in libraries.

As might be expected with a diverse audience of the public, both library users and non-users, there were many different viewpoints expressed.

Envisioning is a serious piece of research that provides insights into the expectations both of practitioners and of the public. Like much that has gone before in this chapter its strength lies in the analysis of future opportunities and challenges rooted in a belief that the traditional model of service delivery will remain relatively unchanged. The forms of governance and management may change, but the underlying service paradigm will be sustained, in contrast, for example, with the more radical futures imagined in the **Academic Library of the Future** study. **Envisioning**, therefore, represents a study that mainly inhabits the H1 curve. That should not be so surprising since while the academic library study was intended to initiate further debate, ACE's expectation was for a document that would help to define what might be the best strategic interventions to take to support public libraries in England. In May 2013 ACE published **The Library of the Future: a Response to Envisioning the Library of the Future** (Arts Council England, 2013a). This set out four priorities for the development of England's public libraries:

- Place the library as the hub of a community;
- Make the most of digital technology and creative media;
- Ensure that libraries are resilient and sustainable;
- Deliver the right skills for those who work in libraries.

While **Envisioning,** and ACE's subsequent development priorities, mainly address an evolutionary process of change, attention must be drawn to the fact that in the conclusions of the report of phases one and two there are several 'hooks' on which to hang debate about future radical change. It makes plain that there may be the need for transformational change in delivery mechanisms:

> "So the core purpose remains as it has been for many years. But the rapid developments in digital technology, the changing relationships between the public and the services they use, and the new economic context, mean that core purpose will need to be discharged in very different ways." (Arts Council England, 2012d, p.22)

Furthermore, that body of conclusions from phases one and two contains a number of other recommendations that in the future may well call for significant change in practitioner worldviews and organisational structures:

> "What public libraries of the future will need, and what is needed now to create the public libraries of the future are:
>
> - Collective vision, encompassing clarity of social purpose, stronger leadership locally, new and different business models, and leadership collaboration nationally.
> - Bold action to communicate to the general public the many ways in which libraries are useful, especially targeting those who stand to benefit most;
> - Evidenced arguments about added-value which are strong enough to have impact in an era of outcome-based funding." (Arts Council England, 2012d, p24)

Finally, Appendix 8.9 contains details of ACE's actions to create library development funds and by the Society of Chief Librarians (SCL) to investigate and set out elements of service to be universally available across England's public libraries[100]. This has led to the setting up an informal group including ACE, SCL, The British Library and the Local Government Association to consider future collaboration across England's public libraries. In 2014 SCL commissioned two reports from Shared Intelligence, the first scanning future digital trends (Shared Intelligence, 2014a) and the second looking at the leadership roles for public libraries, providing a number of recommendations including a clear mission on what digital is for in public libraries and dealing with a large skills gap (Shared Intelligence, 2014b). This proposed the public library as a universal access point for guidance on the use of the Internet. This may influence the DCMS-commissioned Sieghart Review of public libraries[101], due for publication in December 2014.

ENVISIONING THE LIBRARY OF THE FUTURE	Study type	Scope	Innovation type
	Futures study	Public libraries England	H1/H2
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Importance of national strategy
3	2	0	3
See Table 7.3 for details of scoring methods			

8.11 COMMENTARY ON STRATEGIC STUDIES

These documents provide a fascinating picture of the context within which libraries operate and the varying approaches taken to exploring and planning for the future since 2000. The most obvious feature is the distinction between public libraries and academic libraries – seven documents address solely public libraries and one academic libraries – and with only one exception, all of the studies and strategic plans focus on a single institutional form. **Libraries Inspire**, the Welsh strategic plan that embraces national, academic and public libraries within a single plan:

> "The partnership between the libraries' sector and the Welsh Government in developing a single strategic document that draws together the strengths of different types of libraries is unique in the UK and rare in the rest of the world" (CyMAL, 2012, p8).

Libraries Connecting People and Communities (SLIC, 2010) draws attention to joint working on digital developments across academic and public libraries, while the most reflective of the documents – **Academic Libraries of the Future** – in the 'Wild West Scenario' – hypothecates a future where the boundaries between different types of publicly funded libraries have blurred:

[100] SCL universal offers. Available at: http://www.goscl.com/universal-offers/about-universal-offers/ [accessed 15th August 2014]
[101] DCMS press release. Available at: https://www.gov.uk/government/news/william-sieghart-to-chair-panel-to-produce-independent-report-on-englands-public-library-service [accessed 15th July 2014]

> "Libraries that in 2011 were in FE, HE or local authority control are merged into local cooperatives which have contractual relationships with bodies in education. New models of 'library' have emerged at a local level and as chains" (Curtis, 2010, p16).

While **Academic Libraries of the Future** is as close as any of the documents get to a genuine futures study looking 20 years ahead, **Libraries Inspire** is a medium-term strategy with an implementation plan. All of the other documents focus on a medium-term horizon, although most of them have not been translated into implemented action plans.

A second feature of note is the spread of the studies across the four Home Nations. CUKT's **A New Chapter** and **Academic Libraries of the Future** cover the whole of the UK, but all of the others are Home Nation specific – one each for Northern Ireland, Scotland and Wales and four for England. Such diversity is the product of devolution that locates the strategic development of public library services (and, to the extent there is any strategic development, of school libraries also) in the hands of the three devolved governments in Northern Ireland, Scotland and Wales, leaving Whitehall to superintend English public libraries. That English public libraries have been the subject of four studies in ten years without significant impact on services may be of some surprise, but there is at least a continuum of development to be traced across those four studies providing common priorities and also, as will be shown later, offering insight into the relationship between government and the public library service in England. The devolution of responsibilities means that four different approaches are taken in form and content and the degree to which there is governmental 'buy in' on the purpose and the future mission of public libraries. That makes the CUKT study a valuable document embracing all of the United Kingdom (and the Republic of Ireland) as it is able to highlight both similarities and approach in patterns of use and the attitudes of users.

Each of the nine strategic documents and studies reviewed can stand alone as a useful contribution to the development of libraries in the United Kingdom. From **Framework for the Future**, as the first serious government attempt to map out a collective future for public libraries in England, through national planning in **Libraries Inspire** and the challenging scenarios of **Academic Libraries of the Future** right up to the most recent **Envisioning the Library of the Future** there is a considerable range of contemporary data and evidence concerning future possibilities. It is therefore important to consider the extent to which they offer collective synergy; to answer the question, is the whole set of evidence greater than the sum of the parts? Certainly for the researcher or policymaker interested in a broader picture of the library scene in the UK, the range of different perspectives presented makes it possible to draw out similarities and differences. For example, the future scenarios in **Academic Libraries of the Future** provide an alternative, longer-term view of the future compared to the public library related documents that reflect an assumption that change will be evolutionary, maintaining current prevailing practitioner worldview. Arising from this, there are many common themes of form and function that come through from the eight documents relating to the nature of UK's public library

services. Most obviously, a shared sense that a fundamental core activity is supporting learning and access to knowledge (true also of academic libraries).

Collectively the different perspectives support a richer understanding of the attitudes of practitioners and the public. These are particularly well documented in **Academic Libraries of the Future**, **A New Chapter** and **Envisioning the Library of the Future**, where the scope and results of consultation/engagement are presented in some detail. Just as there are similarities, there are differences. The tension between strategy and implementation, as noted above, is an important example. The DCMS **Modernisation Review of Public Libraries** acknowledged the importance of **Framework for the Future's** ten-year vision for a core set of national priorities and in doing so was able to define a wide range of recommended actions to make real a policy framework for a national public library service for England. However, politics in the form of a change of government and the global financial crisis both took away any chance of that becoming a reality. Subsequently, ACE's more strategic and enabling approach in **Envisioning the Library of the Future**, while a thought provoking study in content and execution, certainly has not led to the kind of direct government intervention proposed in the **Modernisation Review** recommendations, or the all embracing scope of Wales' **Libraries Inspire**.

To offer an answer to the question of whether the whole is greater than the sum of the parts, at the granular level of service delivery the two national surveys – **A New Chapter** and **Academic Libraries of the Future** – show the degree to which the core missions, processes and purposes of libraries have more in common than any differences. In reality the services of a public library in any part of the country will be much like any other; a fact equally true of academic libraries. However, at a systemic organisational level the picture is highly fragmented, with shared purpose across the nine documents hard to identify. Just two of the studies are UK wide, seven of the nine focus solely on public libraries while one addresses academic libraries and only one presents an implemented strategic plan that embraces all publicly-funded libraries (**Libraries Inspire**). Elsewhere, the links across the academic/public library boundary are at best mentioned in passing or not at all. Today, given the increasing need to respond to the Network Society with 24/7 access and service aggregation and integration in support of user convenience, the need to find genuine synergy in place of fragmentation becomes a critical task.

CHAPTER NINE
Museums: Strategic Approaches to Service Development

9.1 DOCUMENTS REVIEWED

	Title	Lead Body	en	ni	sc	wa	uk
2001	Renaissance in the Regions: A New Vision for England's Museums	Resource: the Council for Museums, Libraries and Archives	✓				
2004	Manifesto for Museums: Building Outstanding Museums for the 21st Century	National Museums Directors' Conference	✓				
2005	Understanding the Future: Museums and 21st Century Life	Department for Culture, Media and Sport	✓				
2009	Leading Museums: a Vision and Strategic Action Plan for England's Museums	Museums, Libraries and Archives Council	✓				
2010	A Museums Strategy for Wales	CyMAL				✓	
2011	Northern Ireland Museums Policy	Department of Culture, Arts and Leisure		✓			
2011	Culture, Knowledge and Understanding: Great Museums and Libraries for Everyone	Arts Council England	✓				
2012	Going Further: National Strategy for Scotland's Museums and Galleries	Museums Galleries Scotland			✓		
2013	Museums 2020	Museums Association					✓
2013	Museums in the Digital Age	ARUP Foresight					✓

Table 9.1 *Strategic studies and planning documents on museums*

NOTE: Extensive extracts and additional information for each of these documents are included in the Appendices to this Chapter.

9.2 RENAISSANCE IN THE REGIONS: A NEW VISION FOR ENGLAND'S MUSEUMS

The Department for Culture, Media and Sport (DCMS) announced the establishment of a Task Force in December 2000 in response to growing concern about the "…symptoms of a serious crisis in our major regional museums and galleries" (Resource, 2001, p20[102]). These symptoms included:

> "…not enough curators with appropriate expertise, high-quality exhibitions being mounted only infrequently, inadequate education services, and a general failure to meet governing-body and user expectations." (Resource, 2001, p18)

The Task Force was established early in 2001 by Resource (the original name for the MLA), led by a steering group of senior stakeholders. This steering group implemented an extensive programme of research including:

[102] Additional information in Appendix 9.1

- Essays on a range of themes commissioned from authors, supported by working parties of experts.
- A range of consultative meetings with each of the English regions.
- Research commissioned to address gaps within the sector.

The final report of the published report identified four key weaknesses that should be addressed (Resource, 2001, p147):

- Fragmented infrastructure;
- Leadership vacuum;
- Lack of capacity;
- Learning and education.

It cited examples of the problems that the recommendations of the report should address (Resource, 2001, pp10-11):

- **Fragmentation**: There is no national strategy for museums.
- **Good practice is not sustained**: Bright spots of excellence flare up, but many are soon extinguished.
- **Confusion**: There is a constant danger of duplication, failure to learn from the experience of others and inefficient use of resources.
- **Low morale**: The sector is not attracting as many high-calibre entrants as it needs. Museum culture is resistant to change (though becoming less so).
- **Funding**: There is a serious resources deficit throughout the sector, and it is particularly acute in the major regional museums.
- **Expertise and scholarship is in decline**: creating serious barriers to both access and getting the most out of collections.
- **Regional museums are underpowered in terms of ICT**. The content they hold has enormous potential to feed learning networks and national initiatives such as Culture Online but little digitised learning content is available as yet.

It was highly critical of strategic leadership and management:

> "In our view the existing fragmented structures have led to a lack of leadership for the museums community in each region…to make progress means making a break with the existing arrangements." (Resource, 2001, p11)

This latter point makes evident the Task Force's view that radical change would be necessary to bring about a *renaissance* in the future development and co-ordination across the whole of the English museums sector. It highlighted the need for museums and galleries to move beyond their core function of collections curation and interpretation to focus much more on five externally facing aims, key to social development in the 21st century, emphasising co-operation and mutual dependency (Resource, 2001, p9 et seq):

- An important resource and champion for learning and education;
- Promote access and inclusion;
- Contribute to economic regeneration and inclusion;
- Use collections to encourage inspiration and creativity;

- Ensure excellence and quality in the delivery of core services.

In support of these aims, government investment in museums should ensure a robust national framework for museums and galleries (national, regional, local and independent), building a long-term sustainable future with clearly stated social purpose. Additionally, investment should support the creation of a well-managed national collection. (Resource, 2001, p20). Concerning this latter point the report drew attention to the significant role that the Internet would play in the development of greater integration of collections and their exploitation in support of learning and engagement. One of the commissioned papers - **Building the Digital Museum** (Smith, 2000) - cited the argument of the 1999 report **A Netful of Jewels** (NMDC, 1999) that the museum should be a centre for digital learning:

> "…in which sets of images, texts and activities from across the country, connected by subject and theme in an integrated learning environment, are linked together." (Resource, 2001, p61)

It further stressed that sustainable digital development would only be successful if a strategic approach were adopted:

> "The evolving digital environment is a complex one in which change is a constant. An infrastructure solution which addresses only museums is not viable. Instead a distributed sector-wide model is required which builds on the existing resources and expertise of museums and other cultural and learning organisations." (Resource, 2001, p62)

The lead recommendation of the report was the establishment of a new regional framework for museums and galleries with hub museums in each region co-ordinating funding from central and local government, other governing bodies and other funders such as Lottery and the for-profit sector (Resource, 2001, p145).

Renaissance remains the most important and comprehensive review of non-national museums and galleries for its depth of investigation and the wide-ranging nature of the recommendations and detailed proposals for future action (Selwood, 2009). By 2011 government had directly allocated almost £300m to the Renaissance development programme led by MLA (Fleming, 2009). In 2008, to inform a planned submission to the government Comprehensive Spending Review process, MLA established a Renaissance Review Advisory Group to investigate the achievements of the programme between 2001 and 2008, match priorities and practices to current needs and make recommendations for future priorities, management and delivery of the programme. Their report - **Renaissance in the Regions: Realising the Vision** (Selwood, 2009) – identified a number of programme successes. However, alongside these successes, the Advisory Group recommended a number of significant structural changes to the programme, reflecting both the government's shift away from regionalism and also the need for clear and effective priority setting and programme management. The report included 24 recommendations each with associated tasks, the most significant of which were (Selwood, 2009, p13 et seq):

- Government should commit to long-term funding of the Renaissance programme.
- The programme should form a central part of a National Museums Strategy.

- Regional hubs to be dismantled and replaced by flexible partnerships around small core of museums.
- National framework for Museum Development Officers.
- Creation of a challenge fund open to all museums.
- Management of the programme should focus on outcomes directed by a National Board.

The outcomes of the review were widely debated[103,104] and MLA produced its own response outlining how they intended to take the review forward (Museums, Libraries and Archives Council, 2009b). Subsequent strategic documents below show that since 2009 only a small number of the recommendations have been fully adopted.

Overall **Renaissance** has had both strategic and tactical impact on England's museums sector. The initial implementation created a completely new pattern of regional relationships and management while the profile of the programme changed the status of regional museums collectively at the national level and of individual museums locally. Despite the shortcomings identified in the 2008 review, the programme had been transformational in opportunities across the English regions, but the form and nature of the changes remained within the H1 sustaining curve. Longer term the possibility of more radical innovation suggests the programme has at least one foot within the H2/H3 curves.

SUMMARY			
RENAISSANCE IN THE REGIONS	Study type	Scope	Innovation type
	Strategic study + development plan	Museums England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
2	1	0	3
See Table 7.3 for details of scoring methods			

9.3 MANIFESTO FOR MUSEUMS: BUILDING OUTSTANDING MUSEUMS FOR THE 21ST CENTURY

A Manifesto for Museums (NMDC, 2004[105]) was a report to present a shared case for future funding for England's museums. Partners involved were:

- NMDC;
- MLA plus regional agencies;
- Association of Independent Museums (AIM);
- Group for Large Local Authority Museums (GLLAM);
- Museums Association (MA).

[103] See for example commentaries in Museums Journal, 109/8, August 2009.
[104] Museums Association website: summary of responses. Available at: http://www.museumsassociation.org/news/29173 [accessed 10th February 2014]
[105] Additional information in Appendix 9.2

It was a bid to the 2004 tri-annual government Comprehensive Spending Review, justifying additional funding for museums over the coming four years. It was not a strategic plan for the future; neither was it a futures study exploring possible futures for the museum sector. Its importance lies in the fact that it defined the common ground that the partners could agree collectively to occupy and, additionally the 'case' that they could subscribe to. The Manifesto positions museums in nine policy areas – learning, economic impact, travel and tourism, regeneration, civic and community spaces, creativity, research and innovation, social change, partnerships, and global reach (NMDC, 2004, p6 et seq).

A range of outcomes and impact evidence demonstrating the contributions that museums had already made and could continue to make to future national policy agendas supported each of these areas. While, in the intervening ten years, much has changed both in government policy priorities and in the availability of funding, the Manifesto's outcomes-based approach and the fact that it represented a shared view of museum priorities is a useful benchmark against which to judge more recent documents. Finally, of note, is the richness of use and outcomes data that has been collected together and included in the Manifesto, not found in such detail in other documents reviewed.

Summary			
MANIFESTO FOR MUSEUMS	Study type	Scope	Innovation type
	Other (Strategic advocacy)	Museums England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
1	1	0	3
See Table 7.3 for details of scoring methods			

9.4 UNDERSTANDING THE FUTURE: MUSEUMS AND 21ST CENTURY LIFE PROGRAMME

This investigation of England's museums[106] had the longest gestation period of any of the strategic studies under review. It began in 2005 with a consultation document from the DCMS (2005), but it was not until July 2009 that a strategic action plan was published by MLA. The consultation document – **Understanding the Future: Museums and 21st Century Life: The Value of Museums** (**The Value of Museums**) – presented 13 questions under five headings (DCMS, 2005a):

- Collections and their Uses;
- Learning and Research;
- Careers, Training and Leadership;
- Coherence and Advocacy;

[106] Additional information in Appendix 9.3

- Partnership and Measuring Value.

Its purpose was:

> "…not only to celebrate the achievements by the museum sector but also to look at what aspects of England's museums needed to be addressed to face the challenges." (DCMS, 2005a, p50)

A summary of the 75 responses to the consultation was published later in 2005 - **Understanding the Future: Museums and 21st Century Life: Summary of Responses** (**Summary of Responses**). There were strong messages relevant to the themes of this research:

- **Digital technologies and the Internet**: "There was a widespread belief that the sector needed to do more to ensure that the opportunities offered by ICT, electronic access and digitisation were being fully utilised..." (DCMS, 2005b, p11)
- **External links**: "Museums also saw partnership benefits in terms of ICT product development, enhancing university teaching, pre-entry training and post-entry training for museum specialists…There was also need to develop networks, share best practice and break down institutional barriers where there was a mutual agenda" (DCMS, 2005b, p14).
- **Strategic direction**: "Replies were strongly in favour of a national strategy for museums that embraced the whole sector, and would help raise awareness of the value of museum activity, and explain what museums can do and what is expected of them." (DCMS, 2005b, p18)

Summary of Responses reflected the tactical and strategic worldview of museum practitioners and stakeholders, challenges and opportunities, and issues that might form the foundation of a national action plan for evolutionary progress across England's museums. In the words of the report:

> "The responses clearly show that DCMS must take the lead in providing clear guidance to establish a long-term national strategy for museums. The over-arching theme for the framework will be 'working in partnership'." (DCMS, 2005b, p6)

It also made three recommendations for next steps (DCMS, 2005b, p7):

- Establishing a collaborative working group with key stakeholders[107].
- Working towards a wider seminar for the sector early in 2006 to discuss proposals.
- Publish a national strategy framework in 2006, setting out long-term collaborative goals for DCMS and the sector.

The next stage was publication of the outcomes of the working group in 2006. **Understanding the Future: Priorities for England's Museums** (**Priorities for England's Museums**) included plans for a further stage of consultation and debate involving an open call for comments and the organisation of five seminars addressing five high-level priorities (DCMS, 2006, p1):

- Museums and learning: thinking and doing;

[107] Membership to include MLA, NMDC, Museums Association, Local Government Association, Association of Independent Museums, Heritage Lottery Fund, Renaissance Hub representative, University Museums Group and an independent observer.

- Finding our place in the world: the building blocks of belonging;
- Living collections;
- Maximising the potential of people;
- How museums fit together.

Each of these five priorities had associated with it two or three statements of what museums might achieve. Clear evidence is not available to explain why, but between the production of **Summary of Responses** and **Priorities for England's Museums** a different perspective appeared. From the clear statement given in **Summary of Responses** that DCMS "…must take the lead in providing clear guidance to establish a long-term national strategy for museums" (DCMS, 2005b, p6), **Priorities for England's Museums** shifts to a social outcomes perspective paying little attention to the granular level of how priorities might be achieved. Leadership is shifted back to the institutions themselves:

> "The paper sets out what we think museums can do for society and the most significant issues they face in doing so. Many of the answers to these challenges are in the hands of museums themselves. So DCMS hopes this is a set of priorities that the museums sector recognises and that can command broad support from museums and their partners." (DCMS, 2006, p5)

The changing language of chapter headings between **The Value of Museums** and **Priorities for England's Museums** highlight this change:

The Value of Museums (DCMS, 2005b)	**Priorities for England's Museums** (DCMS, 2006)
Collections and their Uses	Finding our place in the world: the building blocks of belonging Living collections
Learning and Research	Museums and learning: thinking and doing
Careers, Training and Leadership	Maximising the potential of people
Coherence and Advocacy	How museums fit together
Partnership and Measuring Value	

Table 9.2 *Comparison of chapter headings used in Understanding the Future*

It would be wrong to overstate the implications of this comparison since DCMS in developing a national strategy would wish to ensure that the Department's broader social policies be made explicit. However, the shift in the style and details between the two reports means that **Priorities for England's Museums** does not appear connected with the practical challenges or opportunities that might face museums. To provide just one example, the 2006 report fails to address the challenges or opportunities of the Internet despite their featuring significantly in **Summary of Responses**, a fact picked up on in the Museums Association's consultation response to **Priorities for England's Museums**:

> "We think it a serious omission that Understanding the Future (**Priorities for England's Museums**) says nothing about online museums, given that new technology is already reshaping the ways that users engage with museums and has potential to transform the

> museums landscape very significantly in the coming decades." (Museums Association, 2007)

Concerning collections, similar views were expressed by the Institution of Conservation. The DCMS…:

> "…lacks vision and is failing to provide effective leadership for the future of England's museums, says Icon in its response to the consultation paper **Priorities for England's Museums**. The central importance of museum collections receives only lip-service; and resources will continue to be diverted to secondary goals while core museum functions will decline." (Institute of Conservation, 2007)

These were but two voices in a range of comments expressing concern about the lack of connection between the high-level social aims of **Priorities for England's Museums** and the need for strategic direction to make things happen. Following its publication in 2006 there is no traceable evidence to indicate that DCMS or others took any further action to advance the concept of a national museums strategy until, in mid-2009, MLA published **Leading Museums: a Vision and Strategic Action Plan for England's Museums**.

The **Understanding the Future** programme, initially committed to developing a national museums strategy for England, ended with a high-level set of priorities that were not well received by the sector. While recognising the risks of interpreting beyond what the evidence reports, it seems likely that the well-intentioned commitment to publish "…a national strategy framework in 2006, setting our long-term collaborative goals for DCMS and the sector" (DCMS, 2005b, p6) became directed by broader DCMS policy agendas – not a bad thing – but at the cost of failing to connect those agendas to the realities of museums practice. Additionally, the potential funding implications of delivering the range of needs and priorities to come out of the initial consultation process may have placed constraints on DCMS's views on what the leadership role of DCMS might be in the future. The value to be derived from **Summary of Responses** and **Priorities for England's Museums** is to contrast two different perceptions about the future leadership of the museums sector. It may not be a dialectical difference, but certainly a difference between a policy view and a practice view.

SUMMARY			
UNDERSTANDING THE FUTURE	Study type	Scope	Innovation type
	Strategic study + development plan	Museums England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
1	1	1	3
See Table 7.3 for details of scoring methods			

9.5 LEADING MUSEUMS: A VISION AND STRATEGIC ACTION PLAN FOR ENGLAND'S MUSEUMS

In its Introduction, **Leading Museums**[108]**,** MLA's action plan responding to the emerging recommendations of the report of the Renaissance Review Advisory Group (see 9.2 above) that proposed major changes to the structure and priorities for the regional museums funding programme, made an explicit link back to the work on the Understanding the Future project:

> It draws on **Understanding the Future** (published by DCMS in 2005 and 2006), which recognised many of the pressures facing the sector and set out some priorities." (MLA, 2009a, p1)

Leading Museums' introduction also stressed the future importance of practitioners sharing beyond the boundaries of the institution and in the way that they curate collections:

> "At the core of the Action Plan is the idea that museums should be less about keeping collections, and more about sharing them...Museums ought to reach beyond institutional walls so curators can increasingly share knowledge and collections to spread enjoyable forms of learning." (MLA, 2009a, p1)

The document stated only briefly the processes of development - consultation with DCMS, museums and representative bodies and the subsequent ten Action Points assign lead responsibility to a number of different agencies. It included a short Context section identifying four policy priorities that underpinned the plan (MLA, 2009a, pp4-7):

- Putting people first;
- Working for excellence;
- Learning at the core;
- Delivering change.

It then presented a ten-point Action Plan, beginning with a Vision Statement and three Action Areas:

> "…the vision that emerges from an understanding of these opportunities and challenges (in the Context section) is for excellent national and regional museums that engage people and enrich lives and communities… actions are proposed in three areas:
>
> - **Supporting excellence** – encouraging and rewarding museums nationally and especially regionally; to develop and use their collections to deliver the very best cultural experiences for the public, and particularly to create narratives for new and wider audiences.
> - **Promoting partnerships** – strengthening the links between museums of all sizes; emphasising growth in regional museums and between museums and other cultural bodies; and building on the relationships with tourism and the creative economy.
> - **Building capacity** – investing in leadership and professional development, in scholarship and collections care, in new finance and governance models, and in digital technology, to ensure effectiveness and sustainability for the long term." (MLA, 2009a, p8)

[108] Additional information in Appendix 9.4

The ten-point Action Plan listed actions with tasks and lead organisations and aspirations or comments appended to each (MLA, 2009a):

- Public funding to follow excellence (DCMS);
- Developing and revitalising the Renaissance vision (MLA);
- Review and develop Accreditation (MLA);
- Strategic approach to collections (Museums Association);
- Enhancing national/regional partnerships (National Museums Directors' Council);
- Museums at the heart of culture and public life (MLA);
- Promoting the role of museums as international ambassadors (NMDC);
- Developing leadership and the workforce (Museums Association);
- Investing in the digital future (MLA);
- Promoting sustainable finance and governance (MLA).

Leading Museums concluded with a Next Steps section that explained MLA's intentions:

> "This Action Plan envisages a close alliance between all in the sector and their stakeholders …it anticipates stronger links with related sectors including schools, colleges, universities, public libraries, archives, tourism, the arts, broadcasting and business…MLA will convene a leadership group, chaired independently, to oversee a timetable with milestones that can be monitored and reported publicly. It is expected that this group will include membership from MLA, NMDC, MA, AIM (Association of Independent Museums), University Museums, NT (National Trust)." (MLA, 2009a, p14)

Later in 2009 MLA established the Leading Museums Group, described as six "independently minded professionals" to discuss future options arising from **Leading Museums** that met for the first time in December 2009. A report in the Museums Journal for January 2010 indicated that the Group would meet quarterly and report within a year (Heal, 2010).

Within the frame of strategic thinking and planning **Leading Museums** is not an easy document to judge. One interpretation is that it presented a positive action focused approach, providing active progression. The focus on excellence, partnerships and capacity building echoing the high-level, long-term priorities for museums set by DCMS in **Priorities for England's Museums** while some of the comments within the Action Plan – approaches to the curation of collections and the management of digital innovation, for example, connected back to the earlier **Summary of Responses** document. Moreover, the fact that a number of strategic partners were associated with the ten-point Action Plan suggests that the enthusiasm for a national museums strategy shown by the outcomes of the consultation phase of Understanding the Future still had a number of supporters prepared to be associated with **Valuing Museums**. In laying out further actions in the Next Steps section it provided progression towards a more strategic and more collaborative future.

A second, less positive interpretation is that it was conceived as a response to the needs of the moment – perhaps to provide a response to the report of the Renaissance Review Task Group (see 9.2) - rather than part of MLA's overall strategic planning process and specifically to drive

forward the expressed need for a national museums strategy. A close reading of the document suggests that it was written in some haste. There are inconsistencies in how its purpose is described within the text, being referred to as ‘strategic action plan’, ‘national action plan’, ‘strategy’ and ‘action plan’. This may or may not be significant to an interpretation of overall purpose, but ‘strategic action plan’ and ‘national action plan’ are not necessarily the same thing. The first implies a long-term plan addressing a sector of unknown geographic scope, while the second is a plan covering a nation. In relation to the purpose and outcomes such variety may not be important, yet a hermeneutic reading of the text, looking beyond the overall meaning suggests, at least, a lack of precision in communication. This kind of variety is also visible in the comments attached to the action points, which vary widely in their purpose and utility in terms of understanding. They include statements of what *has* happened, general comments of issues relevant to *future development* and specific tasks. Three examples are cited here (MLA, 2009a, p9 et seq):

- “The Renaissance programme has been fundamental in creating a vibrant regional museum sector.
- Governance, leadership and income-generation models have to adapt to new circumstances.
- Museums will develop a more strategic and sustainable approach to collecting, collections management and care, and collections knowledge and research. This will include acquisition, dispersal, disposal and more loans between museums, especially regional museums.”

Taken at face value, these issues may only be important in judging whether there was (and is) a collective effort to produce a genuine national strategy for museums. The implementation of the Leading Museums Group late in 2009 with a mandate to report within a year does not suggest urgency. So, what is **Leading Museums**? Measured against the Three Horizons curves it is certainly H1, but in places, referencing risk-taking and innovation, it might be H2/H3. It is not really clear from the content where the Leading Museums Group might position the strategy. With the announcement in 2010 of the closure of MLA, the answer was never to be known.

SUMMARY			
LEADING MUSEUMS	Study type	Scope	Innovation type
	Other (Strategic action plan)	Museums England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
2	2	0	3
See Table 7.3 for details of scoring methods			

9.6 A MUSEUMS STRATEGY FOR WALES (2010 – 2015)

This is a five-year strategy and action plan for museums of all types[109]. It was developed and is managed by CyMAL, a division of the Welsh Assembly Government. As a result CyMAL is able to operate as the lead agency for museums, since what they do will reflect and sometimes define government policy. This means that **A Strategy for Wales** (CyMAL, 2010) has the potential to have significant impact on the future of Welsh museums:

> "Museums promote the cultural life of our nation, they encourage active participation in culture, protect our heritage, help expand our international profile and contribute to our tourism industry. At a local level, museums have a role in delivering vital learning and community services." (CyMAL, 2010, p7)

It then defines three key principles that should underpin the position of museums in Welsh life:

- Museums for everyone;
- A collection for the Nation;
- Working effectively.

The main body of **A Museums Strategy for Wales** has two parts. Three chapters examine in detail the actions required to implement the three key principles. Then a comprehensive Action Plan covering 2010 to 2015, defines delivery responsibilities and assigns one of three priority ratings (essential, preferred if funding allows, desired if time and funding allow). In total 20 actions are identified in the narrative chapters and to these a total of 54 tasks are added (example screenshot in Appendix 9.5). The Action Plan is a strategic management tool rather than an examination of future possibilities, the introduction describing it as a route map, making clear implementation over five years will be an evolutionary process:

> "As this is our first national strategy for museums, these issues range across the scope of museum operations, encompassing the need to develop access, develop collections, and work on the sustainability of the museum sector across the country. To move forward, decisions have to be made about what needs to happen first and priorities have to be set." (CyMAL, 2010)

So, while it is a mechanism for directing strategy it reflects both changing strategic priorities and the particular needs of individual museums to set their priorities within the strategy to meet local needs. The Strategy required CyMAL to review and report on progress each year. This seems to have been achieved through the creation of a steering group meeting three times a year for which the minutes are made publicly available.[110]

A Museums Strategy for Wales is a clearly argued and well-presented development plan for museums and galleries throughout Wales. A great strength is its status as a policy of the Welsh Government. This places CyMAL in a strong position to drive national strategic direction. The

[109] Additional information in Appendix 9.5
[110] Minutes of the Action Plan steering group meetings on CyMAL website. Available at: http://wales.gov.uk/topics/cultureandsport/museumsarchiveslibraries/cymal/museums/museums-strategy-minutes/?lang=en [accessed 14th February 2014].

Internet is considered by referencing another CyMAL policy, People's Collection Wales[111], a development programme to create a single online resource embracing collecting institutions of all types together with community resources. The Welsh Government is funding this between 2011 and 2016 and the National Library of Wales, National Museums Wales and the Royal Commission on the Ancient and Historic Monuments of Wales manage it in partnership.

It is not unreasonable to make comparison between **A Museums Strategy for Wales** and **Leading Museums**. Both, in terms of their intentions and content present an H1 profile, developing a status quo model of museums and galleries. Yet both hint at broader H2/H3 change to reform the institutional relationships and structures. The big difference is that **A Museums Strategy for Wales** has implemented a detailed strategic plan of action embracing all museums with the backing of government, while **Leading Museums** provided no more than outlines for national strategy for England's museums and galleries.

SUMMARY			
MUSEUMS STRATEGY FOR WALES	Study type	Scope	Innovation type
	Strategic study + development plan	Museums	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
3	2	2	3
See Table 7.3 for details of scoring methods			

9.7 NORTHERN IRELAND MUSEUMS POLICY

This document presents a framework defining "…the way forward for the museums sector in Northern Ireland for the next ten years" (DCAL, 2011b[112]). It was published by DCAL in 2011 following a process of consultation in 2010 and with close involvement of the National Museums Northern Ireland (NMNI)[113] and the Northern Ireland Museums Council (NIMC)[114]. It provides a narrative on the importance of the museums sector to individuals, communities and businesses in Northern Ireland and sets out a Vision for a coordinated and sustainable sector that:

- "Develops, preserves and interprets its collections to the highest possible standards.
- Delivers quality services that inspire, educate and engage local, national and international visitors and users.
- Harnesses its strengths and diversity to support economic, social and cultural development in Northern Ireland and a shared and better future (DCAL, 2011a, p10)."

[111] People's Collection Wales website. Available at: http://wales.gov.uk/topics/cultureandsport/museumsarchiveslibraries/cymal/peoplescollectionwales/?lang=en [accessed 2nd February 2014]
[112] Additional information in Appendix 9.6
[113] National Museums Northern Ireland website. Available at http://nmni.com/home.aspx [accessed15th February 2014]
[114] Northern Ireland Museums Council website. Available at: http://www.nimc.co.uk [accessed 15th February 2014]

From this Vision four underlying principles and themes are derived which are intended to guide and enhance planning and delivery. These are:

- "Quality, Professionalism, Creativity and Innovation;
- A Shared and Better Future;
- Partnership;
- Sustainability" (DCAL, 2011a, p80)

To deliver the Vision the Policy presents 27 goals within four strategic priorities (DCAL, 2011a, p11 et seq):

- Developing audiences;
- Education and learning;
- Collections development, care, management and use;
- Infrastructure and investment.

The 27 goals associated with these strategic priorities are all open ended defining trajectories of development rather than end states. For example, within the strategic priority Developing Audiences, the goal associated with use is:

> "To increase the number of people using the services provided by our museums." (DCAL, 2011a, p11)

After the strategic priorities and goals, there is a list of 12 success indicators through which the Department intends to measure institutional effectiveness. These, again, are open ended, defining some change without stating the level of that change or how quickly it should take place. The indicator associated with the goal cited above is:

> "Museums are considered welcoming places, visited, valued and enjoyed by greater numbers." (DCAL, 2011a, p18)

The final section of the Policy stresses that all Northern Ireland museums will be expected to build the strategic priorities and goals into their business plans and that the Department will monitor performance, but the implementation plan will be prepared in conjunction with NMNI, the NIMC and the wider museums sector (DCAL, 2011a).

Implicit in the **Northern Ireland Museums Policy** is a future trajectory that reflects an evolution of structures and service; it is not a futures study presenting a range of possible options. Neither does it give significant attention to radical structural change in the sector or the opportunities and challenges associated with the Internet. Digital innovation is a goal within Infrastructure and Investment:

> "To maximise the use of digital and new and emerging technologies to enhance museums and the services they offer." (DCAL, 2011a, p16)

Yet, as with the other 26 goals, the 'what' and the 'how' are undefined. This is unsurprising since the document is designed as a policy statement with a shelf life of 10 years. The result is alignment with the H1 'sustaining' curve of the Three Horizons Model. The litmus test of the Policy's utility being the effectiveness of its implementation. As proposed by the Policy, the

implementation plan was developed with museums agencies and now forms the foundation of the three-year corporate plan and annual business plan of the Northern Ireland Museums Council[115]. Both the corporate plan and the business plan are structured around the Policy and contain a wide range of actions and indicators.

SUMMARY			
NI MUSEUMS POLICY	Study type	Scope	Innovation type
	Strategic study + development plan	Museums Northern Ireland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
2	2	0	3
See Table 7.3 for details of scoring methods			

9.8 CULTURE, KNOWLEDGE AND UNDERSTANDING: GREAT MUSEUMS AND LIBRARIES FOR EVERYONE

In April 2011, Arts Council England (ACE) took over responsibility for the strategic management of museums and public libraries in England. **Culture, Knowledge and Understanding** (Arts Council England, 2011a[116]) was published as a position statement examining priorities for museums and libraries against the pre-existing ACE document **Achieving Great Art for Everyone** (Arts Council England, 2010). The document presents five ten-year generic and open-ended goals defining a framework for development programmes for museums and libraries (Arts Council England, 2011a, p18 et seq). The goals cover:

- Excellence;
- More people experiencing museums and libraries;
- Sustainability, resilience, innovation;
- Leadership and skilled and diverse workforce;
- Every child and young person has the chance to experience museums and libraries.

As a position statement the document avoids detailing specific tasks or deliverables, focusing on broader aspects of engagement, support and guidance. There is a section that describes some short to medium term tasks for the museums agenda (ACE, 2011a, p10). This is rooted in four strands between 2012 and 2015:

- A programme of major grants;
- A strategic support fund;
- A body of national programmes;
- A final strand that underpins the Arts Council's commitment to museum development.

[115] Northern Ireland Museums Council website – what we do. Available at: http://www.nimc.co.uk/what-we-do/ [accessed 22nd February 2014]
[116] Additional information in Appendix 9.7

Culture, Knowledge and Understanding does not describe a vision for the future nor does it provide a detailed action plan for change and development. Rather, it has committed to sustaining the Renaissance programme, but with funding and structural changes, in part, reflecting the recommendation made by the Renaissance Review Advisory Group in 2009, the broader priorities of ACE and the downward pressure on expenditure. It has very little to say about the Internet, but does provide indicators of the nature of any future national strategic engagement that might take place. Its focus is certainly H1 rather than H2/H3 in the Three Horizons Model.

SUMMARY			
CULTURE, KNOWLEDGE AND UNDERSTANDING	Study type	Scope	Innovation type
	Other (Strategic framework)	Museums England	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
1	1	2	2
See Table 7.3 for details of scoring methods			

9.9 GOING FURTHER: NATIONAL STRATEGY FOR SCOTLAND'S MUSEUMS AND GALLERIES

As a national strategic framework[117] with the backing of government and supported by a multi-year Development Plan, this strategy from Museums Galleries Scotland (MGS) has many similarities with **A Museums Strategy for Wales.** Its origins lie in a 'museums summit' organised by the Scottish Culture minister in June 2009. The summit proposed the creation of a think tank to take forward policy development with a national policy in place by 2010-11[118]. The think tank of museums professionals reported in December 2010. They proposed the creation of a National Development Body (NDB) to be formed out of some of the functions already carried out by Museums Galleries Scotland. The NDB would develop, implement and manage the National Strategy with funding from the Scottish Government.

Going Further (MGS, 2012) outlined a national strategic plan on which MGS, yet to become the NDB, would consult on prior to the launch of the Delivery Plan:

> "It is the first time that there has been a single strategy for the whole sector, to unite it in purpose and to work towards a shared vision to achieve a more sustainable future… the Scottish Government is backing the sector by endorsing this Strategy and setting up a dedicated National Development Body to support its delivery." (Museums Galleries Scotland, 2012, p6)

[117] Additional information in Appendix 9.8

[118] **Summary of the key messages of the summit** and conclusions and next steps, on Scottish Government website. Available at: http://www.scotland.gov.uk/Topics/ArtsCultureSport/arts/Archive/CulturalPolicy/museums-policy/museums-summit/brief-summary [accessed 15th February 2014]

The ambition of the strategy was to bring about collective change. Initially, the task would be to align individual business plans and work priorities with the strategy's vision, aims and objectives. The ten-year vision for the sector was:

> Scotland's museums and galleries will be ambitious, dynamic and sustainable enterprises: connecting people, places and collections; inspiring, delighting and creating public value." (Museums Galleries Scotland, 2012, p8)

Going Further presented six aims with associated objectives and the proposed responsibilities of the NDB. The six aims were (Museums Galleries Scotland, 2012, pp18-39):

- Maximise the potential of our collections and culture.
- Strengthen connections between museums, people and places to inspire greater public participation, learning and well-being.
- Empower a diverse workforce to increase their potential for the benefit of the sector and beyond.
- Forge a sustainable future for sector organisations and encourage a culture of enterprise.
- Foster a culture of collaboration, innovation and ambition.
- Develop a global perspective using Scotland's collections and culture.

Digital technologies and the role of innovation were mentioned in passing. However, the document was a high-level statement of long-term aspirations for the sector in Scotland working collectively through the NDB rather than either an exploration of possible futures or the importance of change driven by the impact the Internet. The purpose was to engage the sector in defining practical priorities for action in the subsequent Development Plan.

Following the publication of **Going Further** in 2012, an extensive programme of sector consultation was undertaken to establish the practical links between the aims of the strategy and the needs and priorities of museums and galleries across Scotland. The resulting report - **Scotland's Museums and Galleries: Activities, Needs & Support - Consultation Report** (Museums Galleries Scotland, 2013b) - contained a detailed analysis of current activities and the needs of the museums and individuals involved. This provided a framework for a three-year delivery plan. **From Delivery to Action** (MGS, 2013a) defined for Museums Galleries Scotland, and for the sector, delivery priorities, activities, and anticipated outcomes and described how they relate to the National Strategy. This delivery plan included an action within the Collections and Engagement delivery priority the task of encouraging "…the use of technology to broaden engagement with collections" (MGS, 2013a, p27).

This review of **Going Further** began with a comment on the similarity between the Scottish and Welsh strategic planning processes and both those are not totally dissimilar to the approach taken in Northern Ireland. The Scottish process, from the initial summit meeting in 2009 to the publication of the delivery plan in 2013 involved the government and has also engaged with institutions and practitioners. There is little evidence of research or consultation to establish the present and future needs of the people of Scotland. **From Delivery to Action** makes reference to research and evaluation without being more specific, apart from research into alternative

funding streams. Such research may, of course, be built into future planning cycles. However, overall the National Strategy aims to refine the status quo model of institutional services and therefore, in regard to the Internet and broader issues to do with new models based around wider collections of institutions it sits under the H1 sustainability curve. In time it may be, as with Wales and with Northern Ireland, new disruptive and transformation opportunities arise from the synergies demanded from a national framework that all institutions share and support.

SUMMARY			
GOING FURTHER NATIONAL STRATEGY	Study type	Scope	Innovation type
	Strategic study + dev'ment plan (NDB)	Museums Scotland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
2	2	0	3
See Table 7.3 for details of scoring methods			

9.10 MUSEUMS 2020

Museums 2020[119] was launched by the Museums Association (MA) in early 2012 as "…a new initiative to create a bold vision for UK museums, focusing on the social impact museums could have on individuals and communities by 2020." (Museums Association, 2012c) The first stage of the initiative was the publication of **Museums 2020 Discussion Paper** (Museums Association, 2012a). Following an Introduction and a Context statement defining the key external issues facing museums, the Paper considered seven areas in which museums could increase their social impact (Museums Association, 2012a, pp12 et seq):

- Making a difference for individuals;
- Well being and happiness;
- Making a difference for communities;
- Participation;
- Making a difference for society;
- Human rights, equality and social justice;
- Making a difference for the environment.

Each section provided a narrative grounded in current activity and the relevant literature together with one or more consultation questions. Much of the narrative examined opportunities, building on identified potential rather than challenges, but examples were included where policy and practical dilemmas might be faced. For example:

> "The biggest area of museum energy use is probably visitor travel. Discouraging fuel-hungry travel is hard for museums that are in rural areas or attract a large international audience travelling by air. This is a great dilemma for many museums, as their funders often expect

[119] Additional information in Appendix 9.9

> them to stimulate tourism, which is rarely environmentally friendly." (Museums Association, 2012a, p16)

A statement of what the MA considers to be the implications for museums followed these narrative sections. Summarising, it states:

> "The MA's vision is that far more museums become responsive and socially engaged. This implies a shift away from museums as largely didactic, definitive and fixed, presenting expert information and narratives in unchanging 'permanent' displays." (Museums Association, 2012a, p20)

The subsequent process of consultation contained a number of elements between Autumn 2012 and Spring 2013. These included consultative practitioner workshops around the UK, online consultation, an online webinar, the commissioning of a literature review on public attitudes to the purposes of museums (Selwood, 2012) and, subsequently, a series of third-party run workshops to obtain the views of the public. Finally there was a workshop with stakeholder representatives from appropriate third-sector organisations – RNIB, Grandparents Plus, Alzheimers Society, for example. Reports were published summarising the outcomes of all these consultation processes (Museums Association, 2012b; 2013b; 2013c). Key outcomes for the practitioner consultation processes were (Museums Association, 2012b, pp1-3):

- While the majority supported the basic proposition of **Museums 2020 Discussion Paper** there were some concerns about the strong focus on impacts and less on the role of collections.
- Organisational barriers needed to be addressed if changes were to be achieved.
- Support for the debate stimulated by the paper.

The public consultation involved deliberative workshops designed to evince public perceptions of and attitudes to the roles of museums. From the discussions it was possible to identify a range of purposes falling within four categories – *essential* purposes, *priority* purposes, *low priority* purposes and *challenged* purposes. To show the extremes, the essential and challenged purposes are listed below (Museums Association, 2013b, pp3-6):

- Essential purposes:
  - Care and preservation of heritage;
  - Holding collections and mounting displays;
  - Creating knowledge for, and about, society.
- Challenged purposes:
  - Providing a forum for debate;
  - Promoting social justice and human rights.

Attention should be drawn also to the fact that these deliberative workshops placed 'fostering a sense of community' as a low priority purpose. This particular conclusion, running against what might be argued as the orthodox practitioner view on the instrumental value of museums in social development, highlighted a disconnection between practitioner and public perceptions.

Finally, the outcomes of the third-sector stakeholder workshop suggested a number of ways that museums might re-focus for the 21st century (Museums Association, 2013c, pp3-11). For example:

- Museum professionals should be less risk averse.
- Museums should become more porous to outside views and engagement.
- The Internet can help.
- The difference between the physical and the virtual is narrowing.
- Engage a wider population.

In mid-2013, this process of consultation, debate and analysis culminated in the MA launching an advocacy and motivational tool – **Museums Change Lives** (Museums Association, 2013a). It was a vision document supported by a range of web-based resources[120]. It focused on three core museum activities – enhance well being, create better places and, inspire people and ideas – and includes a set of behaviours and priorities that museums might adopt to improve social impact. These include reflecting on current priorities, impact, researching what others are doing, and seeking out suitable partners.

The **Museums 2020** initiative was an extensive programme in both scope and time. It involved documentary research, considerable consultation and debate both with practitioners and with the public and allowed time for careful assessment and analysis of the evidence disclosed. The various documents produced during the programme shed light on practitioner perceptions and priorities and public expectations and views on the proposed priorities for increasing social impact. It made abundantly clear from the first publication of the Discussion Paper that the emphasis was on the demand side – social impact – rather than supply side issues and that the process was consultative, to encourage practitioners to reflect on their ambitions for the future. Arguing, as the Discussion Paper did, that collections are "a means to an end" (Museums Association, 2012a, p17) threw down a gauntlet to practitioners to be clear about what the end(s) might be, examining the balance between curatorial and social outcomes. Challenge also appeared at the point where the **Discussion Paper** stressed the institutional role of creating and *sharing* knowledge alongside curatorial responsibilities (Museums Association, 2012a, p13).

The underlying form of development the programme proposed represented a process of evolution of an existing service model (H1) rather than a more disruptive or transformational paradigm. On both the social effects of the Internet and the implications of those effects on collecting institutions, **Museums 2020** is silent. The Context section of the initial Discussion Paper is the closest that the programme got to an environmental scan to highlight key trends. It is brief and subjective, unsupported by any evidence (Museums Association, 2012a, p5). Furthermore, while digital technologies are referred to in regard to widening access to collections, the section on environmental issues fails to recognise any environmental role for

[120] **Museums Change Lives web resources**. Available at: http://www.museumsassociation.org/museums-change-lives/web-resource [accessed 20th November 2013]

networking of museums services to reduce travel. Setting such opportunity beside the increasing expectation of the public that access should be 24/7 and the comments from the third-sector stakeholder workshop that the gap between the real and the virtual is closing, it is both surprising and unfortunate that such change drivers do not appear in **Museums Change Lives**.

Museum 2020 produced a rich seam of evidence and opinion that ought to encourage wider reflection about the future of museums. Its main limitation is the failure to include serious reflection on wider social and technical issues beyond those applied to the management and delivery of existing services, looking outward to the user from the museum rather than considering all aspects of the wide social context in which the museum can expect to operate.

SUMMARY			
MUSEUMS 2020	Study type	Scope	Innovation type
	Futures Study	Museums United Kingdom	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
1	2	0	2
See Table 7.3 for details of scoring methods			

9.11 MUSEUMS IN THE DIGITAL AGE

ARUP Foresight (ARUP) is a commercial think tank and consultancy focused on the future of the built environment. **Museums in the Digital Age**[121] examined the long-term future of museums:

> "As we live increasingly mobile, digital and virtual lives – with personalised user-experiences and services at our fingertips – museums will have to find new ways to tell stories and engage their audiences. As digital experiences and physical spaces merge, who will be the audience, and who the curator? Will museums function exclusively in the cultural sector or continue to expand into other markets? How and where will content be exhibited and delivered?" (ARUP, 2013, p5)

Rather than a perspective rooted in the existing policies and practices of museums, about which it has very little to say, the study's focus was the potential effects of social and technical change on museums and their relationships with the individual and society. The study consisted of three main sections:

9.11.1 MUSEUMS TRENDS

> "Trend research takes a holistic view of the world, covering medium to long-term developments within society, technology, economic, environment and politics" (ARUP, 2013, p7).

[121] Additional information in Appendix 9.10

The report identified three key trends relevant to the future of museums, each with a number of sub-categories:

- **Content diversification**: “As people become accustomed to having unlimited access to information, how can museums present their content in a manner that is appealing to different groups within society?” (ARUP, 2013, p8)

  (Sub-categories: collaborative curation, shifting cultural expectations, maker movement, beyond objects.)
- **Immersive experience**: “Increasingly, users have become accustomed to interacting with a screen, rather than engaging directly with the people around them. As we continue to become increasingly reliant on digital technology, museums will be challenged to create experiences which will be considered novel and valuable, social rather than anti-social, by the ever more techno-savvy audiences of the future within the museum”. (ARUP, 2013, p12)

  (Sub-categories: experience integration, smart environments, mobile, temporary and transient)
- **Sustainable and open spaces**: “As cities become increasingly dense and public space becomes more valuable, museums must consider the significance of their role in place-making. How will museums provide public spaces for their audiences? How can museums encourage cultural exchange amongst users, who vary greatly in age, skills, and social and economic backgrounds?” (ARUP, 2013, p16)

  (Sub-categories: climate-ready design, positive impact design, community integration)

9.11.2 FUTURE VISITOR PROFILES

> “An increasingly globalised society will give rise to more culturally and demographically diverse audiences. In an effort to expand their reach, museums will venture outside conventional community boundaries to engage with people beyond their core demographic.” (ARUP, 2013, p22)

Profiles identified:

- Expanding global middle class;
- Generation Twitter;
- Ageing populations;
- Lifestyles of health and sustainability;
- Expanding target audience.

9.11.3 FUTURE SCENARIOS

> “ARUP Foresight mentored a module investigating the Museum of the Future, with students from the Narrative Environments course at Central Saint Martins College of Art and Design in London. Students were asked to envision scenarios for the year 2040 and conceive the future museum-visitor’s experience, the design of the museum space, as well as the museum’s position as an institution across various sectors.” (ARUP, 2013, p28)

The four radical scenarios were:

- Living histories and super plants (Kew Gardens);
- Nomad havens (V&A Museum);

- New collections (Wallace Collection);
- The listeners (Freud Museum).

Unlike all of the other strategic documents that have been considered, **Museums in the Digital Age** is a speculative futures study produced by a private sector company not directly involved with the museums sector. ARUP Foresight's mission is to; "…identify and communicate the trends and issues likely to have a significant impact on the built environment and society at large."[122] Its focus, therefore, is not on a particular discipline, social issue or organisation, but on the application of futures studies techniques. Consequently, the report presents a very different perspective on the future of museums from all of the previous museums documents. It sits in particularly marked contrast to **Museums 2020** where only marginal attention is paid to social and technical change, that programme's focus being the advancement of museums within existing social policy agendas. **Museums in the Digital Age** pays no attention to such issues, speculating about the long-term potential for museums to reformulate their service offers in response in an increasingly network-focused society (the Network Society).

SUMMARY			
MUSEUMS IN THE DIGITAL AGE	Study type	Scope	Innovation type
	Futures study	Museums Country agnostic	H2/H3
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
3	3	0	1
See Table 7.3 for details of scoring methods			

9.12 COMMENTARY ON STRATEGIC STUDIES

A collective assessment of the ten sets of documents relating to the strategic development of museums places nine clearly in the strategic planning category and only one - **Museums in the Digital Age** – that presents future scenarios and user profiles based on long-term social and technical trends. Two of the studies are UK wide – **Museums 2020** and **Museums in the Digital Age** – although the latter is actually country agnostic and could apply to many developed countries. Perhaps the most telling conclusion from the analysis is the obvious fact that Northern Ireland, Scotland and Wales produced one strategic document each, all of which were intended as, and have become, national strategies. In England where there have been five studies since 2000, no such national strategy has emerged. In **Understanding the Future: Summary of Responses** DCMS did recognise this need, but as noted earlier, a change of government made such a move impossible.

[122] ARUP Foresight home page. Available at: http://www.driversofchange.com [accessed 21st February 2014]

Arts Council England has adopted some of the structural and funding recommendations reported in **Renaissance in the Regions: Realising the Vision** (Selwood, 2009) for example - national challenge funding and replacement of the museum hub structure, but shows no sign of wishing to develop a broader framework for the future of all England's museums.

It would be wrong to suggest that the creation of a national strategy could, of itself, produce some miraculous transformation of museums and galleries - the strategy as a disruptive force for change - not least since the need for consultation and consensus in such documents means that they must focus mainly on what the majority can support. Equally, it is possible that the absence of a collective strategy might engender more innovation on behalf of individual museums. Geraldine Kendall, writing in the Museums Journal in Spring 2013, highlighted that while none of the three established national museums strategies had a completely smooth ride to implementation, the imprimatur of government support positioned museums much closer in the national political consciousness (Kendall, 2013). She also reported the opinions of those involved in the strategies that the larger sector in England would make it tougher to produce a single national framework for action. Yet being on the political radar is as important in England as elsewhere, something the success of **Renaissance in the Regions** underlined, having had DCMS support at the outset, and funding to deliver change.

At a more granular level it is possible to distill from the majority of the documents a strong practitioner commitment to an H1, status quo, vision of the future. There is recognition that the advance of the Internet is important for service development, but within the context of the existing service model. Only **Museums in the Digital Age** questions the future relationship between the physical and the virtual: the destination and the 'always on'. Interestingly, that study places emphasis on the role of the museum as a key component defending the diminishing civic spaces within cities. An important factor for a civilised culture perhaps, but museums are not physically ubiquitous, not even in the way that public libraries are supposed to be. Not everyone lives in a city and not everyone has easy access to museums. None of the other strategies and studies raise this tension between the constraints of geography and the potential for the Internet to overcome those constraints. Finally, echoing all but one of the library and archive strategies (**Academic Libraries of the Future**), within the museum documents, little concern is shown for broader trend analysis and extrapolation in all but the **Museums in the Digital Age** study.

The ten museums documents provide a rich seam of information about the priorities, capabilities and political status of museums as institutions and museums practitioners as advocates for their services. At the 'macro' level there are obvious differences in approach and impact, while at the 'micro' level a wide range of similarities can be observed.

CHAPTER TEN
Archives: Strategic Approaches to Service Development

10.1 DOCUMENTS REVIEWED

	Title	Lead Body	en	ni	sc	wa	uk
2004	Listening to the Past, Speaking to the Future. (Archives Task Force report)	Museums, Libraries and Archives Council (MLA)					✓
2004	Archives Policy for Northern Ireland: Consultation Document	Department of Culture, Arts and Leisure (DCAL)		✓			
2009	Archives for the 21st Century	Department of Justice (DOJ)	✓			✓	

Table 10.1 *Strategic studies and planning documents on archives*

NOTE: Extensive extracts and additional information for each of these documents are included in the Appendices to this Chapter.

10.2 LISTENING TO THE PAST, SPEAKING TO THE FUTURE

In 2003, the Museums, Libraries and Archives Council (MLA) was commissioned by the Department for Culture, Media and Sport (DCMS) to "…carry out an in-depth analysis and review of the state of the UK's unique and diverse archives" (Museums, Libraries and Archives Council, 2004b, p3[123]). The MLA established the Archives Task Force (ATF) comprising leaders of the archives sector and other interested parties. The Taskforce commissioned a series of research essays: online access and digitisation, scholarship and learning, stewardship, and infrastructure. More than 700 individuals and organisations were also consulted as a part of the work of the Taskforce. The resulting report - **Listening to the Past, Speaking to the Future** (Museums, Libraries and Archives Council, 2004b) - provides a clear statement of the value and role of archives in the 21st century:

> "An archival heritage unlocked and made open to all citizens in a way that engages them and empowers them to use archives for personal, community, social and economic benefit". (Museums, Libraries and Archives Council, 2004b, p6)

It made a series of recommendations, together with an implementation action plan that would deliver an ambitious UK-wide strategy. These recommendations proposed the creation of an online Archive Gateway as the route to access archival resources including both the creation of the Gateway and a major programme of digitisation around popular themes (Museums, Libraries and Archives Council, 2004b, p24). Alongside this major programme of work were recommendations for increased advocacy, research to build an evidence base, develop ways to

[123] Additional information in Appendix 10.1

increase the role of archives in teaching and learning, tools to build participation from communities, businesses and private and specialist archives, increasing the development of sound and vision archives, modernisation of services and improved workforce development, and finally, finding the means to build a firm foundation for ongoing co-operation with all of the Home Nations. All of which was estimated in the report at £10m with £3.8m for the cost of the Archive Gateway (Museums, Libraries and Archives Council, 2004b, p61 et seq).

The recommended next stage of development was for MLA to develop an action plan. With the closure of the MLA in 2011, a full documentary record no longer exists, but an archived copy of the MLA website from 2005 shows that an Archives Development Programme was in place including a range of aspirations reflecting the vision of the ATF report (Museums, Libraries and Archives Council, 2005):

- Archive collections should be comprehensive, reflecting diverse communities and shared histories.
- People are entitled to enjoy attractive and accessible archive buildings and public spaces, managed to the highest standards, with easy to use online access to archives.
- Young people should have opportunities to develop their talents to the full through access to archive resources wherever they live;
- Communities should be able to use archives and acquire inspiration, knowledge and pleasure.
- The public, service providers and policy-makers should recognise archives as integral to the UK's heritage and with equal quality as museums and libraries.

By 2007 the website was reporting an archives programme worth £250k in place, to develop more widely projects already tested on a small scale. This programme was limited to England. Until the middle of 2006 continued development of UK-wide plans and strategy seems to have rested with the long-established Inter-Departmental Archives Committee, guided by The National Archives (TNA), but subsequently discussions seem to have taken place on a bilateral basis (The National Archives, 2008, Para 6.3). This is likely to be the result of the growing strategic role of The National Archives across England and Wales and its status as a department within government and its legal responsibilities for the public record.

The UK-wide strategic aspirations of **Listening to the Past** were not achieved either in strategic co-operation or of funding on the scale proposed. However, it remains an important document for the same reason the DCMS **Modernisation Review of Public Libraries** is important, providing a vision for a joined-up service with a number of practical actions to achieve it. In addition it provided a contemporary picture of the archival service as central both to record keeping for the future and a key mechanism supporting wide understanding of the past.

SUMMARY			
LISTENING TO THE PAST, SPEAKING TO THE FUTURE	Study type	Scope	Innovation type
	Strategic study + development plan	Archives United Kingdom	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
3	2	0	3
See Table 7.3 for details of scoring methods			

10.3 ARCHIVES POLICY FOR NORTHERN IRELAND: CONSULTATION DOCUMENT

This Consultation Document[124] is the outcome of a process of policy development for archives in Northern Ireland initiated by the Department of Culture, Arts and Leisure (DCAL). **Archives Policy for Northern Ireland** (DCAL, 2004) describes the stages leading up to its publication. The process began in 2002 with a two-day conference of archive experts from across the UK and Ireland to identify current trends and influences on the future of archives. Running in parallel with the work of the Archives Task Force (see above), Action Working Groups were set up by the DCAL to review the outcomes of the two-day conference. The working groups considered six aspects of archival practice (DCAL, 2004, p7):

- Future Acquisition of Archives;
- Education, Learning and Outreach;
- Improving Access;
- Preservation;
- Public Relations (PR) and Advocacy;
- Records Management.

The work of the conference and subsequent Action Working Groups was collated along with the outcomes of the Archives Task Force into the Consultation Document published in October 2004. Of the work of the Task Force the consultation document stated:

> "The overall objectives are to move UK archives into a new century that will be characterised above all by increased access for everyone, the development of new audiences, a more central role for archives in education and a clearer demonstration of the relevance of archives to individuals and to communities. The Archives Policy for Northern Ireland will contribute to these wider objectives while taking local needs fully into account." (DCAL, 2004, p5)

This positioned the engagement of Northern Ireland with the, then, aspiration for a UK-wide vision for archives. The Public Record Office of Northern Ireland (PRONI) was nominated to lead on the integration of archives and the development of an archival policy for education and

[124] Addition information in Appendix 10.2

learning[125]. On the future role of the Internet the consultation document proposed:

> "To facilitate quick and easy access to information a common portal should be developed to allow users to cross search the catalogues and digitised resources of archives, museums and libraries." (DCAL, 2004, p16)

Note in this quote that the proposal embraced all of Northern Ireland's collecting institutions. Additionally there should also be a co-ordinated programme for the digitisation of "selected archives" in Northern Ireland. **Archives Policy for Northern Ireland**, alongside statements on the policy objectives and social purposes of archives, included a draft development plan allocating task responsibilities to institutions and setting timescales for their delivery, under the six aspects of archival practice above. Table 10.2 provides an example:

ASPECT OF ARCHIVAL PRACTICE	Preservation
TASK	4.3 In the digital age it is essential that the preservation of the electronic media is addressed immediately if electronic records are to remain accessible for future generations. PRONI as one of the lead implementers of the Northern Ireland Civil Service –wide Electronic Document and Records Management Systems Infrastructure Project (see also under Records Management at 5.6.2) should therefore assess the requirements for digital preservation within the Agency and, in consultation with others, across the Northern Ireland Civil Service. A digital preservation strategy would incorporate both 'born digital' records and new digital resources that are being created to improve access.
RESPONSIBILITY	PRONI and Public Agencies
TIMESCALE	Immediate

Table 10.2 *Archives Policy for Northern Ireland digital preservation task*

Despite the considerable effort put into the development of the Consultation Document, it has been impossible to trace any documentary evidence to indicate what was the consequence of the consultation process. There is nothing on the DCAL or PRONI websites to indicate any further action towards ratification and adoption of the archives policy or any business plans that might provide an indication of the recommendations being taken forward. As a result, the main utility of the document is to provide an indication that the broad thrust of the ATF report would form the basis for future developments in Northern Ireland.

[125] PRONI changed from being an external agency of DCAL to become a division within the Department in 2006.

SUMMARY			
ARCHIVES POLICY FOR NI	Study type	Scope	Innovation type
	Strategic study + development plan	Archives Northern Ireland	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
2	1	1	3
See Table 7.3 for details of scoring methods			

10.4 ARCHIVES FOR THE 21ST CENTURY

The point was made in Chapter 6.3 that the public record has always been an essential agent preserving formal agreements and laws and, more generally, providing a documentary record of the actions of state, region or, indeed in some cases, private businesses and other organisations. As a result it has been the prescribed responsibility of a government department accountable to Parliament to maintain the public record since around 1840.

Archives for the 21st Century[126] (Ministry of Justice [MoJ], 2009) is the first official policy document on the role of archives in the 21st century and represents an important statement concerning the future management and exploitation of archives of all types, beyond the official public record[127]. Its scope and vision is very different from the previous statement – **Government Policy on Archives** - made to Parliament (Lord Chancellor's Department, 1999). That document, while recognising the importance of all archives, the growing importance of the Internet and the increasing need for regionalisation of activity, focused on the management of traditional archival skills and the established and evolving structures and governance of the public archive infrastructure. The 2009 edition is more strategic, focusing on vision, challenges and future actions rather than existing processes. It reflects the creation of The National Archives from the integration of the Public Record Office and the Historical Manuscripts Commission in 2003 - a significant structural change - and the dramatic impact that the Internet had had for archives in the ten years since 1999; plus the great potential still to be achieved:

> "The information world has changed beyond all recognition since the past policy on archives was published ten years ago. Both the creation and use of the information have been revolutionised, not least through our ability to go online without being tied to a computer at home or in the office, or to work on the move with technology that has become smaller, faster and more sophisticated.
>
> The speed with which the digital world has been embraced across society means that people have come to expect information to be accessible online, at all times, and their approach to archives is no different. It is essential that the archives sector is able to respond to this challenge and continues to increase the proportion of records that are

[126] Additional information in Appendix 10.3
[127] The policy document's jurisdiction is England and Wales and a separate version was presented to the Welsh Government. Available at: http://wales.gov.uk/docs/drah/publications/091203archives21stCenturyen.pdf [accessed 5th February 2014]

> accessible online.
>
> Archives are an increasingly popular cultural and educational resource, used to support the study of local and family history. This is due in part to the wider availability of digital sources and also encouraged by the popularity of TV programmes such as *Who Do You Think You Are?*[128] Archives are also a major resource for academic research and publishing, which contribute significantly to the UK's international research and competitiveness across a broad range of academic disciplines." (MoJ, 2009, p1)

Archives for the 21st Century defines itself as a "call to action…a strategic vision for the sustainable development of a vigorous, publicly-funded archive sector across England and Wales." (MoJ, 2009, p2.) A description is provided of what that strategic vision would enable:

- "Every citizen feels a connection to their nation state and their local community...Communities are empowered to collect and share their stories to inspire, inform and entertain.
- Every child experiences history brought to life through innovative access to our written, recorded and visual heritage, enriching their learning… through the creative use of archive material to promote active citizenship.
- People of all ages and abilities can explore their personal identity by finding out about aspects of the past, such as their family history, and can do so easily through access to the internet at home or even on the move.
- The community is offered a range of volunteering opportunities, enriching lives and benefiting archives alike.
- Public sector organisations and businesses make better decisions because they have access to all the relevant evidence and are fully informed about lessons from the past…
- The value of the nation's archive heritage is unlocked, supporting the UK's internationally significant research and its intellectual and economic benefits." (MoJ, 2009, p9)

Five strategic recommendations are made (MoJ, 2009, p5):

- Bigger and better services in partnership;
- Stronger leadership and a responsive, skilled workforce;
- Co-ordinated response to the challenges of managing information;
- Comprehensive online access;
- Active participation in cultural and learning partnerships.

Additionally a ten-point list defining the features of an excellent archives service is provided. The document ends with a list of actions, making clear that TNA should take a leading role in negotiating national deals and work with MLA and with CyMAL to develop action plans for England and for Wales. (Ministry of Justice, 2009, p21)

For several reasons **Archives for the 21st Century** is a landmark document for the archives sector in England and Wales and, by association, Northern Ireland and Scotland also. First, it presented an aspirational vision for the future of publicly funded archive services,

[128] To this must be added the impact of *ancestry.com* opening up family history research, transforming the relationship between archives and society. Available at: http://www.ancestry.co.uk [accessed 5th February 2014]

acknowledging the realities of socio-technical change and the new expectations that this has presented to individuals and communities. Second, it called for specific actions to be led by TNA to establish a plan for development and, in so far as possible, to implement it in partnership. The subsequent impact of this report is considered in the next section.

SUMMARY			
ARCHIVES FOR THE 21ST CENTURY	Study type	Scope	Innovation type
	Strategic study + development plan	Archives England and Wales	H1
Socio-technical change	Consumer focus/engagement	Links to other collecting sectors	Priority of collective strategic direction
3	2	0	3
See Table 7.3 for details of scoring methods			

10.5 COMMENTARY ON STRATEGIC STUDIES

The first point to make in reviewing the strategic documents for archives is that there is nothing from Scotland. The last Scottish Archives Policy was published in 1998 and since then, although the National Archives of Scotland (NAS) does publish regularly a corporate plan these do not provide the kind of forward looking approach that might be expected from a strategic document. No corporate plan has been published for this current period 2013-14. There is a document in the corporate plan section of the NAS website entitled Key Strategies that provides a list of 15 commitments to actions, for example:

- We will develop an ICT strategy to serve our own business needs.
- We will identify our customers and their needs.[129]

This document is undated so its topicality is unclear. The most recent corporate plan, 2010-13 (NAS, 2010), has a short section entitled "over the next five years we need to…" followed by eight bulleted headings, but while these provide general areas for direction, they include no information on the context in which they have been developed or how they relate to contemporary trends.

Turning to the documents reviewed, it is possible to identify a common thread of development, both before and after the publication of **Archives for the 21st Century** in the subsequent work of TNA, CyMAL and MLA (see below)**,** arising from the work of the Archives Task Force (ATF)**.** The thread is also reflected in the **Archives Policy for Northern Ireland**. Commenting on the outcomes of the ATF, Shepherd, writing in **British Librarianship and Information Work 2001-2005**, drew attention to:

> "…the dismay in the archival community when the ATF report added new activities, such as community archives, to the agenda, while stating that there was small chance of

[129] Undated single page document in the NAS website. Available at: http://www.nas.gov.uk/documents/keyStrategies.pdf [accessed 5th February 2014]

> significant increases in funding locally or nationally." (Shepherd, 2007, p250)

Yet, while it is understandable that an ambitious £10m programme failed to raise all the funding necessary, the ATF research and report provided a clear statement of what might be the ambitions for a 21st century archives sector in the UK. Between the creation of TNA and the work of the ATF (both in 2003) and the publication of **Archives for the 21st Century** in 2009, a number of co-ordinated activities were started. For example, in 2003 Archives Awareness Month was launched, (now re-branded as *Explore your Archive* and led by the Archives and Records Association[130]), plus the MLA-led Action for Archives programme (Owen, 2010).

In 2010, as one of the main actions of **Archives for the 21st Century**, TNA published, with MLA, **Archives for the 21st Century in Action** (The National Archives, 2010). Part action plan for English archives, part advocacy document, it expanded on the five recommendations of **Archives for the 21st Century**, stating what TNA and MLA would do and what chief executives, vice-chancellors and archives managers should do. At the same time CyMAL commissioned a four-year **National Marketing Strategy 2011-14** building on **Archives for the 21st Century**. This was developed through wide participation to enable:

> "…local archives to participate in strategic planning in Wales, and assist the Welsh Assembly Government to determine policy priorities. It will identify areas of strength and weakness in current marketing provision and assist in identifying future work programmes. It is also anticipated that the results of the project will feed into cross-domain audience development programming, as part of a move towards more integrated service delivery for the museum, archive and library sector". (Creative Cultures, 2011)

Following the closure of the MLA in 2011 and the transfer of sector leadership and development of publicly funded archive services to TNA, a *refreshed* version of the original joint TNA/MLA document was produced:

> "For publicly funded archive services, many are experiencing new governance structures and fewer resources, a result of difficult choices in public funding. For all archives, developments in technologies and user expectations mean that delivering the same services in the same way as in the past is not an option.
>
> A positive response to these changes can be seen in the resourceful approaches of many archives, leading to a number of innovative and radical initiatives. *Archives for the 21st Century In Action: Refreshed* is a showcase for this radical new work and a call to action for archives to develop these opportunities and to put archives at the heart of the individual, community and nation as a vital asset and invaluable resource". (The National Archives, 2012, p4)

This latest report underlined the strategic leadership role of TNA, presenting a series of actions over the subsequent three years listed as either "The National Archives will…" or "Archives should…" For example (The National Archives, 2012, p12):

> The National Archives will…

[130] Explore Your Archive on Archives and Records Association website. Available at: http://www.archives.org.uk/ara-in-action/news/563-evaluation-of-explore-your-archive-2014-begins.html [accessed 12th October 2014]

- Continue to innovate and develop solutions for the management and accessibility of digital records at scale.
- Promote the contribution that digital continuity and preservation makes to wider organisational needs, strategies and goals.
- Work with partners to make training, information and guidance available through The National Archives' web resources and to share good practice from across the sector.
- Explore the potential for archiving websites using models adapted from the web archiving pilot.

  And Archives should...
- Ensure clear strategies are in place to enable the selection, management and preservation of digital records, in parallel to those for paper records.
- Deliver better links between IT departments, record creators, record managers and archivists.
- Explore the potential for archiving websites relevant to their other collecting activities.
- Explore options for recruiting digital records specialists or sharing access to such expertise.

Despite diminishing resources across the last decade, it is possible to evince from the landscape of archive strategy, first of all the emergence of a sense of how a national framework within which all publicly funded archives might work and, second, the central role of TNA as sector leader, explicitly in England and Wales and tacitly with Northern Ireland and in Scotland. During 2013 TNA launched the UK-wide Archives Accreditation Scheme providing a consistent standard of management, curation and service development to which archives might aspire (The National Archives, 2013). Note that the final draft of this scheme formed a part of the documentary analysis of Chapter Five. A further practical illustration is the National Digitisation Consortium project reported in a brief news item in the April 2015 edition of ARC Magazine (April 2014, no 308). It is a project involving 22 English archives to create a themed digital resource of schools registers between 1887 and 1914[131] (more themes may follow). Facilitated by TNA and the Archives and Records Association, while not transformational in scale or approach, it does represent awareness of the need to create digital collections that offer *one-stop* accessibility. Moreover, the decision to award management and disclosure of the resources to Findmypast, a commercial online genealogical service, provides an example of how future public/private partnerships might be developed to mutual advantage

Finally, in 2012, soon after the changed role for TNA, Kingsley, Director of Sector Development at TNA, published a reflective article on the future vision for the sector and the strategic leadership role for TNA (Kingsley, 2012). This article provides a rich understanding of the areas in which that role will be exercised – leadership, ministerial advice, engagement to get things to happen, and collections development and discovery. The strategic direction emerging across the archives sector offers one model of how greater collaboration might be encouraged in the future.

[131] National Schools Registers 1870-1914. Available at http://www.findmypast.co.uk/school-registers [Accessed 16th April 2015]

CHAPTER ELEVEN
Literature Review: Disruptive Innovation in Theory and Practice

11.1 CHAPTER PURPOSE

The final component of the Social Analysis process considers the extent to which collecting institutions have examined actively the potential opportunities, risks and imperatives for using the Internet to innovate service platforms and delivery. In Chapter Four the effects of the Internet on the relationship between the supplier and the user were demonstrated using a range of different examples from the outer world. This was summarised in Generic Driver Four:

4. The Internet redefines the relationship between the supplier and the user	
Innovation and risk	Many successful online services have been the result of a good idea initially tested with minimal overheads and with the ability to evolve through user testing. Failure costs may therefore be low, encouraging experimentation. Online services are readily scalable and offer low transaction costs, increasing contestability and competition, seeding new forms of business models and more innovation. (4.3.3)
User focus	Understanding user needs and expectations is central to success. Services must be user driven; Science of user engagement makes possible closer understanding of user behaviours and needs. The user can be valuable partner and co-creator. (4.3.1; 4.4)
Skills shift	With evolving technologies and user expectations and behaviours new supplier skills may be required, in innovation, design and user understanding. The user may also become a contributor to the supply stream (4.3.4; 4.4)
User effects	Always on, 24/7 services where convenience may trump comprehensiveness and trust. (4.4)

Table 11.1 *Generic Driver Four*

The criteria associated with Generic Driver Four are central to understanding how in the future collecting institutions might maximise value from the Internet. Chapter Eleven examines the degree to which research, reflection and practice demonstrate the potential (or the reality) for radical improvement to the value that the user is able to obtain from the exchange process, whether in accessibility, audience reach, utility or richness of resources or a combination of those factors. This approach aspires to find insights into H2/H3 innovation (see Table 11.2) within and beyond collecting institutions. There are two components: first, the examination of the 290 papers identified in the search described in Chapter 7.4 to establish their significance for H2/H3 innovation. The sections below consider this material categorised by institutional form, followed by a section looking at literature that explores co-operation and convergence. The second component identifies exemplars of contemporary practice (both in the inner world of

collecting institutions and the outer world beyond). These are chosen to demonstrate disruptive and/or transformational impact, redefining the boundary exchange between the user and digital resources. As with the previous three chapters, the evaluation framework described in Chapter 7.4 will be used:

INNOVATION TYPE	• **H1**: **Sustaining innovation** that maintains the existing orthodoxy; the status quo • **H2: Disruptive/transitional innovation** likely to create risks and opportunities that challenge the status quo • **H3: Transformative forms** arising from the interaction of H1 and H2; the new status quo
KEY FEATURES RELEVANT TO THE RESEARCH HYPOTHESIS	
Response to socio-technical impact of digital technologies and the Internet, now and in the future	
Centrality of the consumer in the future design and delivery of services	
The value of links between different collecting sectors	
The importance of collective strategic direction	

Table 11.2 *Evaluation criteria for research and innovation*

11.2 MUSEUMS

Understanding the collective purpose of institutions is an essential datum against which to assess why and how innovative techniques might be applied. The museum literature on mission and purpose emphasises philosophical interpretation of institutional history, roles and contemporary purpose. For example, in the Introduction to **The Birth of the Museum**, Bennett (1995, p8) describes the key driver for the first section of the book:

> "…the primary theoretical co-ordinates are supplied by Foucault's concept of liberal government. This is drawn on to outline the ways in which museums formed a part of new strategies of governing aimed at producing a citizenry which, rather than needing to be externally and coercively directed, would increasingly monitor and regulate their own conduct."

Hooper-Greenhill (1992, p204) in **Museums and the Shaping of Knowledge** drawing on Foucault's "empirico-transcendental doublet of man" – the ambiguous relationship that exists between man as the object of knowledge and man as the subject (or recipient) of that knowledge:

> "…'objects' in the modern age are no longer presented on the table of classification where their morphology defines both their identity and their inter-relationships. During the classical age anything became an object through its invisible features. Now material things present themselves in their relation to human beings."

Finally Martinon, writing in **Museum Philosophy for the 21st Century** (2006, p60):

> "If the museum is serious about the presentation of its collection, the preservation of 'the past', its history, then it must think of the future quite simply, but most definitely, as the

> opening of space itself, what the philosopher Jacques Derrida understands by 'l'avenir', the 'to-come'."

Debate about the significance of post-modernism in defining the future purposes and principles of museums may or may not have direct bearing on engagement with the Internet and represents only one viewpoint in a range of introspective views to be found in the literature (for example, Anderson, 2004; Knell, MacLeod and Watson, 2007; Message, 2006; O'Neill, 2006). Yet the focus on the origins and philosophical grounding of museums is relevant to this chapter for several reasons. First of all, it highlights a distinction between the philosophical grounding of museum practice and that of the libraries and the archives, whose priorities, as reported later in this chapter, tend to be grounded in the techniques and practices of collections management. Few of these reflective museums documents have anything to say about the future implications of the Internet and disruptive innovation. Three examples of holistic debates about the future of museums are relevant:

1. **The annual Museum Metamorphosis conference** organised by Leicester University's School of Museums Studies (Leicester University, 2013). At the 2013 conference there were broad debates on subjects such as "how external and internal circumstances, politics and characters can affect and change the museum and its representative strategies" and the important role of futures studies "…to force the user not to predict, but to expect and acknowledge possibilities: in that way, a museum can become fully aware of its actions and consequences". The conference was hosted by PhD researchers and provides a unique, inter-disciplinary perspective on change and development.

2. In early April 2014, University College London hosted a one-day conference for early career museums professionals entitled **The Future of Museums**:

> "In twenty years time the people who are now early career museum professionals will be running the museums sector. This conference and workshop invites these professionals to set out their ideas, visions and aspirations for what that sector should look like." (Souhami, 2014, p1)

Delegates were invited to develop a manifesto for the museums sector, defining a future trajectory towards 2034. Later in April the Museums Association Comment blog published a short summary of the contents of the resulting manifesto (Feeney 2014). The three headline topics reported were: connecting collections (collaboration rather than competition), stop the elitism of the current educational sovereignty of the Masters qualification and the sector to focus more clearly on visitors and learning. While all of these issues will have long-term significance for museums it would appear from the report that digital innovation would not play a leading role.

3. **The Future of Museums Conference** (August 2014)[132] – an online conference bringing together museums specialists from around the world to discuss short to medium term

[132] Future of Museums conference website. Available at: http://futureofmuseums.com [accessed 21st August 2014]

implications of digital change reported in the US **Museum Horizon Report** (New Media Consortium, 2013) projecting technological impact on museums up to five years ahead:

- 1 - 2 years – BYOD (bring your own device) and crowdsourcing;
- 2 - 3 years – Electronic publishing and location-based services;
- 4 - 5 years – Natural user interfaces and new preservation and conservation techniques.

At the conference Elizabeth Merritt, a futurist and founding director of the Center for the Future of Museums, presented on the likely implications of technical change over the next 20 years in three scenarios, depicting possible futures based on current trends:

- The *quantifiable museum* (the Internet of Things, everything interacts);
- The *disconnected museum* (no wifi, the museum is low tech and is completely disconnected from the Web); and
- The *distributed museum* (traditional model, but putting reproduction art into communities, renting out goods, free access to all digital material for re-use, a managed portal into everything else that is out there, the building becomes irrelevant).

However, the presentation was process based rather than addressing core purpose or radical change and had nothing to say about wider collaboration with other collecting institutions (Merritt, 2014).

Other museum documents speak more practically to the theme of this chapter, examining future purpose through the lens of the boundary exchange between the user and the collection. These range from relatively pragmatic approaches to change (Simon, 2010), consideration of the need for reflective practice in user engagement (Lynch, 2011) to approaches to re-imagining museums (Thompson et al, 2011). All call for a significant shift of emphasis away from the primacy of the collection to the needs of the user and value delivered.

The Museums Association (MA), as the lead professional body for the sector, through its journals has reported on the take up of particular technologies and their value for museums in the future. Topics examined in **Museums Practice** worth noting are, planning for digitisation (Dawson, 2001; Poole, 2003), digital learning (Atkinson, 2011), mobile technologies (Atkinson, 2012) and building virtual collections (Sorensen, 2008). However, the point must be made that these five items are the key forward-looking articles over a fourteen-year period in a journal that appears 12 times a year. In March 2010 the MA's **Museums Journal,** with the support of the Heritage Lottery Fund, organised a round table discussion on digital innovation. It brought together nine experts - thought leaders, funders and practitioners - and considered issues ranging from the need for national strategy and programmes of digitisation to the role of innovation within museums. At the round table members were first invited to describe an inspiring digital online project (MA, 2011, p1). In response to the question, the majority of those present struggled to think of even one example, which, given the extensive public investment in

history and culture related digital projects by 2010[133], says something either about the quality of all of those projects or about the awareness of round table participants. The transcript records a fragmented debate fluctuating from high level strategy to detailed routine processes. Considerable concern was expressed about how progress might be made given the diversity of museums and the pressures under which they operate. Two telling points from Ross Parry, Academic Director, School of Museum Studies, University of Leicester, are worth citing in relation to the topic of this chapter:

> On practitioner worldviews: "There is a very long professional culture still in our DNA that says we are venues with physical objects that people come to visit, and there are curated exhibits – but the offer for the last 15-20 years from digital networks has been of information or media objects being co-curated, and museums joining a conversation or contributing to a wider network of voices and sites. It is an entirely different paradigm." (MA, 2011, p16)
>
> About museums on the web: "…there is a big shift that we are going through at the moment which is…not about building huge monolithic museum websites and waiting for people to come to them, but actually to go out to where people are on the web." (MA, 2011, p27)

In his Introduction to **Museums in a Digital Age**, Parry, while acknowledging that museums have made considerable progress in the adoption of digital techniques, draws attention to the emerging diversity of disciplines; the "digital heritage as diaspora":

> "Digital heritage practice and research may just as easily attract an educationalist as it may a subject curator. It could equally draw to it the attention of a museum director as it could attract the curiosity of a PhD student. Likewise it might seize the interest of a technologist and computer scientist as it might a designer or exhibition developer." (Parry, 2013, p3)

This 'diaspora' effect of the Internet is a significant phenomenon, equally relevant to libraries and archives in redefining roles and relationships between and beyond institutions and practitioners in the future. Such comments on the ways that technological innovation demands new practitioner and institutional approaches, hinting at more disruptive and transformational change, while rare in the literature reviewed, are to be found in a few other writers. Over ten years ago Castells (2001, p4) pointed out that:

> "…the articulation between the real and the virtual, the physical and the symbolic is increasingly developing new cultural hybrids".

He posited a fundamentally new role for the museum intervening to bridge the gap between the emerging Network Society – a global society of hyper-communication – and the consequent breakdown of communication between particular communities and identities (Castells, 2001). Slightly more recently, Knell (2003, p140) examined the dialectical challenge between the physical and the virtual:

[133] For example, the NOF Digitisation Programme, http://eprints.rclis.org/17518/ , JISC Digital Content Programmes, http://www.jisc.ac.uk/content, Europeana, http://www.europeana.eu . [all accessed 5th March 2014]

> "In the comfort of our own homes, interacting with an online resource, a cup of coffee by our side, the chance of a successful learning outcome is heightened. In contrast during a museum visit, we are not inclined to read labels and soon get tired of walking, standing and staring…"

He counters this argument by reminding the reader that the presence of the physical object is a different and more human experience than the digital encounter - the physical experience bringing home the true nature of the object and its creation. Technological advances have continued to change the relationship between the real and the virtual to the point where, in 2011, Cliff Lynch, the Director of the US Coalition for Networked Information, could argue that digital representations were no longer just surrogates for the physical objects, being as useful and, in most cases more accessible and more robust than the original object (Lynch, 2011). A point made also made by members of the third-sector stakeholder workshop that was a component of the Museums 2020 initiative (see Chapter 9.10). Finally, there are two documents that address in a more analytical way the relationships between museums and innovation, both from agencies external to the sector. **Insights into Innovation in European Museums: The Impact of Cultural Policy on Museum Characteristics** is a study based on a survey of museums in France, Italy, Spain and the UK. It describes innovation as:

> "…innovation in museums and cultural institutions has a tendency to incorporate new systems, technologies or processes that change both how the museum is run and how its exhibits are presented to the visitor." (Vicente, Camarero and Garrido, 2012, p652)

The authors frame their analysis of the data around three kinds of innovation relevant to museums:

- Technological innovations applied to management;
- Technological innovations applied to visitor experience;
- Organisational innovations.

At 32 pages, this is a substantial article, reviewing cultural policy, innovation studies, funding, scale and governance of museums within the four countries. It includes a significant level of statistical analysis and comparison to assess the types and extent of innovation. However from an overall sample of 3500 museums (800 in the UK) a total of only 408 completed surveys were received (89 from the UK) so that the conclusions of the study must be treated with some caution. The definitions of types of innovation are useful categories and the UK data, insofar as it reflects wider national trends, shows that technological impact has been low:

Type of innovation	
Technological innovations applied to management	13.76%
Technological innovations applied to visitor experience	17.32%
Organisational innovation	3.47%

Table 11.3 *Types and scale of innovation impact in UK museums from survey data (Vicente, Camarero & Garrido, et al, 2012, p670)*

Within the three categories the most common activity associated with innovation in management was digitisation of collections while for the visitor experience it was the provision of information about the museum online (the website).

Digital Culture: How Arts and Cultural Organisations in England Use Technology is a 2013 survey covering a range of institutions within Arts Council England's portfolio including museums, but not public libraries. Jointly funded by ACE, Arts and Humanities Research Council and Nesta[134], its purpose was to track the use and impact of digital technologies. Of the 1138 museums invited to complete survey questionnaires only 125 (11%) responded so, like the European study above, it cannot be known how representative the data are of all museums. However, in comparative terms, the report concluded that:

> "Different parts of the sector are experiencing different levels of impact from digital technology. Museums report lower levels of impact in many areas. In contrast, performing arts venues are much more likely to report major positive impacts, including on their revenues (almost a third compared with just 3 per cent of museums)." (Arts Council England, 2013b, p3)

The other fact of interest comes from the section of the report dealing with Attitudes and Organisation Structure:

> "The survey also asked respondents to assess the extent to which they agreed with a set of statements focusing on organisational structure, culture and mindset relating to digital technologies… When split by organisation type, museums again report significantly different results to other arts and cultural organisations. For all five statements, museums are significantly more likely to disagree, suggesting they perceive greater structural and cultural challenges. For example, 22 per cent of arts and cultural organisations as a whole strongly agree that most of their senior management are knowledgeable about digital technologies, compared to just 10 per cent for museums." (Arts Council England, 2013b, p42)

Even with the constraints of the response rate, these comparisons suggest differences that must be noted for the synthesis process of Part Three.

The museums literature reviewed shows that there is a rich seam of material on philosophical principles against which to test the value and effects of possible future priorities. Yet, there is little serious or consistent debate about the digital opportunities or challenges particularly in regard to the boundary exchange between the user and the collection. Chapter Four described the increasing impact on both the supply side regarding technological possibilities and on the demand side in relation to citizen expectations and behaviours. From the evidence presented the long term effect of these appears not to be a priority for the MA, echoing the priorities in the **Museums 2020** study (Museums Association, 2012a, 2012b, 2013b) reviewed in Chapter Nine; not for new professionals in developing the **Manifesto for the Future of Museums** (Souhami, 2014) or for existing managers in the statistical evidence presented in the final two documents reviewed above.

[134] Nesta website. Available at: http://www.nesta.org.uk/about-us [accessed 18th March 2014]

It would certainly be wrong to suggest that individually museums are not engaging with technological possibilities, using social networking, providing websites, digitising and giving access to collections online. Yet, measured against the Three Horizons curves this all points to sustaining innovation where service innovation is taking place. There is no evidence from the literature of innovation that might have fundamental (i.e. disruptive) effects on museum priorities and organisational structures (the H2/H3 curves). There may be eminently sound reasons for this in institutions under pressure. However, aside from the debates of the Museums Metamorphosis and Future of Museums conferences, the absence of serious discussion about long-term strategy for socio-technical change and the potential risks of continued fragmented development, the socio-technical determinism of the Network Society may make museums further at risk in the future.

11.3 LIBRARIES

> "Most librarians are inclined to make a book something sacred. But we ought to recognise and employ it as a tool to be used not a fetish to be worshiped. Perhaps the library of fifty years time from now will have outgrown the present book and relegated it to the older inscriptions on clay. Our great function it to inform or to inspire, or to please; to give to the public in the quickest and cheapest way information, inspiration, and recreation on the highest plane. If a better way than books is found we should use it." (Dewey, 1926, p310)

The review of libraries literature overall shows digital technologies as much more mainstream within service priorities when compared to museums. Due to the information/document focus of early Internet developments, both academic and public libraries were early adopters first in support of service management and, through the 1990s, the increasing exploitation of user-facing information services and journal resources in electronic form. One strand of this developmental trajectory was reported by Batt in a series of six national surveys of IT in public libraries between 1985 and 1998 (Batt, 1985, 1987, 1990, 1992, 1994, 1998), followed ten years later in a retrospective review of IT use in public libraries – **From Punched Tape to Wifi and Beyond** (Batt, 2009b). This latter study drew special attention to the importance of the People's Network project:

> "In 1999 the UK Government agreed to fund the People's Network project, awarding funding of £170m to the Library and Information Commission to pay for ICT learning centres in all 4,200 public libraries (£100m), skills development for 30,000 people working in public libraries (£20m) and the creation of new digital resources for informal learning (£50m)...In no small part, the Government's willingness to make this first major national investment in public libraries was due to the demonstrable success and enthusiasm of library workers to adopt and develop technology for public benefit over the previous 10 years. Public libraries were already perceived as places where successful connections between citizens and information technology might be made." (Batt, 2009b, p8)

In **Public Libraries in the 21st Century**, Goulding (2006) reviewed the impact of the People's Network programme quoting a wide range of comments from practitioners on the high impact that the programme had both on users and on the profile of public libraries generally. She

reported Brophy's conclusion that the programme was a *turning point* for public libraries (Brophy, 2003). The programme was both high profile and disruptive, having a direct impact through wide public access to ICT in all UK public libraries, training all staff in its use and also funding a major programme of digital content creation. In light of more recent developments (for example in Chapter Eight on the future roles of public libraries), it is less certain that the People's Network was transformational and has not led to any significant changes in institutional practices. Evidence for Goulding's study came from published resources, plus more than 60 interviews with those in and involved with public libraries. The final section of the book – *Discourses of Public Library Futures* – presented a range of concerns and developmental priorities from the interviews on the future roles and purpose of the public library. These included future agreement on a shared vision for public libraries and effective methods of communicating the vision. From these Goulding concludes:

> "These examples of prominent discourses suggest that the social purpose and position of the contemporary public library service is still being negotiated. Recent policy initiatives as well as broad social, technological and economic developments have brought issues of impact and rationale into sharp relief…" (Goulding, p347)

Seven years on from Goulding's study, those issues continue to challenge the future of the public library service.

More recently, Batt (2009c), arguing for the urgent need for a compelling and shared narrative for English public libraries, referred to a comment on libraries more generally made by Lorcan Dempsey, Vice President, OCLC Research in a review of **The Cambridge History of Libraries in Great Britain and Ireland Volume 3**:

> "One has a sense of a profession more comfortable with asserting rather than demonstrating value, which focuses on the means rather than the end, and which does not do a good job in connecting its agendas to broader social and political agendas." (Dempsey, 2007)

The tension between the requirement for a service that meets many different needs and a clear vision that communicates the personal and social value of the public library service remains unresolved, although still debated (see, for example, Chapter 8.10). Baker and Evans (2011, p10) present a range of forecasts on the future roles of public and academic libraries, understandably not coming a specific conclusion about the shape of the future, but making the critical point that matching services to user need should be sovereign:

> "Libraries will need to develop resources and services for this changed and changing environment that best meet users' needs, and in particular to develop and focus upon online provision while continuing to be organisations rooted in their user communities."

Across the last two decades, the adoption of digital media within university and college libraries has tended to run ahead of public libraries due to supply side focus on providing online academic journals and information services and the increasing demand from academics and students for networked based services (Jefcoate, 2006). New forms of learning using ebooks,

managed online teaching and, most recently the massive open online course (MOOC) have been developed and co-ordinated through the work of the Jisc (Mowat, 2006). The UK-wide lead for higher and further education provided by the Jisc has been a major driver for the adoption of digital media within universities and colleges to the extent that 24/7 access to resources is now the orthodoxy:

> "Librarians have always believed passionately in the concept of service. But there is now a need for a complete reversal of thinking, and successful libraries will have to build their services around the user's workflow; libraries must be available to users when and where needed, rather than users being expected to visit the library at times convenient to the organisation." (Law, 2011, p363)

While differences are apparent in the challenges faced by public libraries and academic libraries, the relationship between service provision and the evolving digital landscape has been a leitmotif for all libraries. This most obvious commonality is redefining the relationship between the service/collection and the user – the boundary exchange – the key concept for this chapter and one that has been the subject of a number of user studies. These range from studies specifically assessing the impact of digital technologies, on the role of the information professional…:

> "It is time for information professionals in the UK…to wake up to the realities of what might be described as the second digital revolution that is rapidly being colonised by other disciplines with theory and rhetoric that address its far reach implications for the way we live and do business." (Moss, 2008, p69)

…or 'digital' as a medium for targeting new audiences:

> "New digital platforms are transforming the ways in which people discover and read their books, while new websites and services are changing their engagement with fellow readers. For those involved in writing, publishing, selling and lending books, these are tumultuous but exciting times, full of both threats and opportunities." (Reading Agency, 2011, p3)

…to studies considering the needs and usage of audiences of various types to understand how services might be better matched to demand in the future. Reflecting the diversity of demand faced by public library users, studies tend to be generic (MLA, 2010; Chad, 2013) while in the academic sector, where audiences may be more easily delimited attention focuses on research and learning (Jisc, 2012; Brown and Swan, 20007; Research Information Network, 2011; Showers, 2013).

Alongside the range of literature examining the challenges and opportunities of digital innovation, and user and usage studies, there is a body of literature investigating future priorities for practitioner skills sets and those material focused on the relationship between space and place: the future library as destination. **In Better Library and Learning Space: Projects, Trends and Ideas** (Watson, 2013), a range of authors consider future service portfolios and the extent to which the physical library should be sustained and for what purposes. With a defined audience, the academic library may have more clarity in how the library should operate in the future. Watson, reviewing how academic libraries might exploit

physical space in the future, makes the point that there are 'key ideas' other than the display of physical assets that must be considered. These relate to issues about the ways in which the space can engender the right emotions for learning and the right arrangement of spaces for different learning styles; the physical place becoming as, or more, important than the resources it contains (Watson, 2013, pp117-129). Later in the book Sternheim and Bruijnzeels (2013, p209) present more radical arguments on the future of the library as a destination:

> "When all is said and done, do we really need a building? Can we work without the traditional arrangement of the library? Can modern technology liberate us from that hidebound, passive presentation of library collections? This kind of presentation does not invite people to learn and discover, and it is this inviting quality that will be so essential to the library of the future."

They describe ideas such as the *context library* (using RFID tags to guide users on subject journeys through collections) and the *city as a library*, exemplified by the Architecture of Knowledge Project in Rotterdam where subject collections from the public library were distributed to city locations (churches, schools, hospitals, etc.), where workers with specialist skills could support them. Such disruptive ideas support the main theme of **Better Library and Learning Space**: the design of services based on very clear understanding of user need, driven by new approaches to learning.

The antithesis of The Architecture of Knowledge Project where the library was spread around the city, is an approach that retains the library as destination, but with physical materials removed. Back in 2010 the Physics and Engineering Library at Stanford University did just that creating a space that is less to do with shelving and checking out books and much more about research and discovery; "…it saves its space for people, not things. It features soft seating, 'brainstorming islands' a digital bulletin board and group event space" (Krieger, 2010). This is an approach since repeated at a number of other US universities as teaching has shifted to the bookless curriculum (Massis, 2013) and, of course, the mushrooming of MOOCs with students based across the globe rather than on the campus (Barber, 2013; Steel, 2013). In 2013 the first US public library opened without any books:

> "Over in San Antonio, the soon-to-launch BiblioTech is seeking to use technology to remove barriers to library access, enhance education and literacy and promote reading as recreation. What's different about this library? Well, there's not a book in sight… rather than aisle-upon-aisle of dusty books, there will be e-readers to share, computer terminals, laptops and tablets." (Sawers, 2013)

Bookless libraries may be appropriate responses for particular local needs, but are just one component of an issue topical in the literature and in practice. Goulding (2006) describes the shift to integrate new forms of digital media with traditional media as the 'hybrid library' where online services support an evolving status quo. This blending of the physical and the online is something clearly visible in the academic library approaches above and also now in public libraries with the Arts Council's Reference Online service[135] and the recently announced Access

[135] A subscription-based electronic content service for English public libraries managed by Arts Council

to Research project[136] providing access to a wide range of academic journals. There are a number of variants of the hybrid form within the literature. For academic libraries the point was made above that with a defined agenda to support students and researchers the library must track the changing needs of those two audiences. Waaijers (2006) uses the word 'libratories' to embrace the emergent roles of academic libraries as they are required to deal with the functions of library, repository and collaboratory.

Within public libraries the diverse nature of the audience and their needs makes it harder to be as focused and a variety of portfolios have emerged. These range from the four National Offers for Public Libraries developed by the Society of Chief Librarians described in Chapter Eight to the many variations of services emerging in the recent development of community run libraries where traditional book lending may be mixed with a range of community generated activities, for example, focused on encouraging creativity under the umbrella concept of the 'makerspace' (Naylor, 2013). The makerspace concept has been developed more fully in Denmark. Thorhauge (2013) describes a model that is being used as a part of planning new public libraries. The model comprises four components – learning space, inspiration space, meeting space and performative space – the latter correlating to the concept of the makerspace. Schulz (2014), describing the new central library of Aarhus defines the performative space. Users can find:

- Access to tools that support their creative expression.
- Creative expression through workshops with professional artists, designers, Multimedia developers.
- Platform to publish and distribute users' works.
- Support for engagement and innovation.

Writing in **Trends, Discovery and People in the Digital Age**, O'Connor (2013) considers the broad portfolio of strategic issues that practitioners may have to consider to develop services in the future. These include risk, staff, technology, organisational issues and user engagement. It is a short piece and therefore, more a recipe than a detailed analysis of all that might in the future be involved with such strategic issues – what is implied by them, how they might interact. The premise of O'Connor's paper comes from **The Crisis in Research Librarianship** (Anderson, 2011) that identifies three key trends:

- Perception matters more than reality.
- Patrons genuinely do not need librarians as much as they once did.
- Value that is not valued is not valuable. (O'Connor, 2013, p270)

Such trends will be equally relevant to museums and archives.

England. http://www.artscouncil.org.uk/what-we-do/supporting-libraries/reference-online/ [accessed 11th March 2014]

[136] A new initiative to give free, in-library access to a wide range of academic articles and research in public libraries across the UK. Subjects include art, architecture, business, engineering, history, languages, politics, philosophy, mathematics and the sciences. Available at: http://www.accesstoresearch.org.uk/about [accessed 11th March 2013].

In reviewing relevant literature on libraries several recurring themes may be identified. First, that the Internet has already had impact on many aspects of the operation of libraries of all types. Libraries have had to adapt, whether as an access route to the Internet, the management of collections, dealing with new media formats, changing forms of learning and the social expectation of information 24/7. Most change has not altered radically the nature of service propositions, although there are some examples of libraries that have made the decision to use their physical spaces in very different ways. The steady rate of change, visible across all collecting institutions, is not surprising. In Lynch's words:

> "One thing that took me a long time to understand was how hard and slow it is to effect major change on a complex system with a great deal of inertia and a lot of vested interests that have grown comfortable with each other, even though sometimes nominally in opposition or tension." (Drake, 2012, p32)

The second theme concerns a small number of papers that focus on the long-term implications for change caused by the socio-deterministic effects of the Internet. **Studies such as Riding the Waves or Caught in the Tide?**, the International Federation of Library Associations recent trend report (IFLA, 2013) describing the long term implications for the information environment, while others focus on the medium term effects of changing technological solutions (New Media Consortium, 2014). Other studies examine in detail how collecting continues to change in response to new media formats that together challenge the traditional service paradigm. Examining the future value of the library Matthews highlights Dempsey's opinion that, "libraries are operating at institutional level while our users are operating at network level" (Matthews, 2013, p168). Dempsey has also underlined the importance of presenting services to meet user needs in three words – "access, attract, achieve" Dempsey, (2012, p201). In mid-2014 he co-authored a paper examining some of the key issues facing the user services in the future. Ubiquitous discovery and fulfilment services such as Amazon and Google books suggest that the dominant 'outside-in' collection – physical collections in fixed locations – will shift to an 'inside-out' with the managed delivery of objects to the user. Furthermore, future decisions on infrastructure and collaboration will be driven by decisions on transaction costs. If the Web is cheaper and more effective it will drive developments. Although the paper is focused on academic libraries, it has much food for thought for libraries of all types (Dempsey, Malpas and Lavoie, 2014a; 2014b). None of these documents attempts to describe the key characteristics of the Internet and how services might be to advantage; rather treating socio-technical determinism that must be reacted to.

Brindley, speaking as CEO of the British Library, placed users at the top of her list for the future – "know your users and keep close to them (and your lost users and your non-users)" (Brindley, 2006, p484). However, while these are most important messages concerning what should be done, there is less clarity about how such changes might become ubiquitous. The only examples of how a new direction might be evolved are in two papers by academic librarian Brian Mathews. His 2012 white paper **Think Like a Startup** presents a roadmap for future library entrepreneurism for strategic innovation: "we don't just need change, we need

breakthrough, paradigm shifting, transformative, disruptive ideas" (Mathews, 2012, p1). More recently (2014) his paper **Librarian as Futurist** builds on the work of Cornish (2004). He argues that librarians must develop new mind-sets, focused on long-term change rather than a status quo:

> "Knowing how to discover, design, assess, and address possible scenarios is becoming increasingly important. In order to make wise decisions, personally and professionally, librarians need to know what they might expect from the future and put plans in motion to optimise outcomes and reduce uncertainty." (Mathews, 2014, p6)

11.4 ARCHIVES

On the continuum that links the museums' focus on philosophical introspection apparent in the museums literature and the more pragmatic perspective of libraries, the archives literature sits somewhere in the middle. There are studies that consider the role of the archive within both professional and broader philosophical principles but at the same time there is material on the impact of the explosion of digital records in the last two decades and their effects on the technical processes of digital archive and document management.

One of the earliest (post 2000) contemporary studies on the impact of the Internet on the future of archival activities was Barata (2004). The study was undertaken for the MLA in 2002 and thus contributed to the subsequent work of the Archives Task Force (see Chapter 10.2). The mandate for **Archives in the Digital Age** was to consider "…the specific needs of the archives domain, with particular emphasis on local administrations" (Barata, 2004, p64). Its particular focus was the implications of policy and legislation on the role of the archive, and it surveyed archive plans of local authorities. By 2002 the government had already implemented a policy that all government services would be delivered electronically by 2005 and all newly created records would be stored electronically by 2005. (The former commitment would not become a reality until 2013 with the full implementation of gov.uk). However, the study highlighted some serious practical challenges faced by local authorities (Barata, 2004, p69):

- Archives programmes for the most part poorly positioned within local authorities;
- Electronic records management was commonly viewed as an ICT issue;
- Electronic records management lacked adequate resourcing;
- The National Archives (TNA) provide good advice and guidance, but the ability to act locally was constrained by lack of influence and lack of resources.

Barata's study presented a management/policy-orientated perspective on the public record in the digital space. Other authors have explored the increasing significance of digital records and their 'networkability' from the viewpoint of professional practice. Cunningham, writing in **The Future of Archives and Recordkeeping** contrasts the custodial archive, where the archive was characterised as "…being passive and introspective, and almost exclusively concerned with the custodial management of archival holdings…" with the post-custodial archive where:

> "Most larger archival programmes now allocate significant resources to inter-institutional co-operation, including the development of collaborative online access services." (Cunningham, 2011, p173)

This trend was reflected in the development of a range of collaborative online finding aids during the first five years of the new Millennium (Shepherd, 2007, p259). These included Access to Archives (A2A)[137], the Archives Hub[138], SCAN[139] and ANW[140], along with current developments such as TNA's Discovery service[141] and the Archives Portal Europe[142].

Convery (2011), also writing in **The Future of Archives and Recordkeeping** took a more reflective stance on the broader challenges and opportunities of the archival record in the digital age, examining the range of implications for the archivist in the rapidly changing landscape of the Network Society. She extends Cunningham's argument on the need to move beyond the custodial tradition:

> "In a digital, networked society control over information through custody is no longer a valid concept. Access to ebooks, ejournals, online newspapers and the unimaginable richness of information online from any computer and now even from any mobile phone calls the idea of libraries and archives as physical spaces of information provision and authentication of what is deemed to be valuable information into question." (Convery, 2011, p193)

The authentication of the digital record or object is, of course, an issue to be faced by all collecting institutions due to the pliable nature of the digital. Convery addresses the challenges of the custodial tradition further in making the point, already examined earlier in this thesis and a central point for this chapter that, "engagement with the user is probably the most prevalent paradigm shift in the digital world." The interactive nature of Web 2.0 developments means that the user has become creator:

> "Information creation is no longer the exclusive reserve of a select few in a structured environment but a widespread preoccupation of the masses in the virtual sphere…" (Convery, 2011, p190)

These issues change radically the traditional one-way boundary exchange and thus the future roles and responsibilities of the archivist. In **Archives and Recordkeeping: Theory into Practice***,* Bell (2014, p200), having described the "messy" relationships that have been formed from the mix of people, technology, records and information, suggests that the recordkeeping profession may have to face up to fundamental disruption in their traditional practices and priorities:

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[137] The A2A database contains catalogues describing archives held locally in England and Wales dating from the eighth century to the present day. Available at: http://www.nationalarchives.gov.uk/a2a/ [accessed 17th March 2014]
[138] Archives Hub aggregates catalogues for over 200 higher education archives. Available at http://archiveshub.ac.uk [accessed 17th March 2014]
[139] Scottish Archives Network website. Available at http://www.scan.org.uk [accessed 17th March 2014]
[140] Archives Wales website: 7,000 collections in 21 archives. Available at: http://www.archiveswales.org.uk [accessed 17th March 2014]
[141] TNA Discovery Service. Available at: http://discovery.nationalarchives.gov.uk [Accessed 24th March 2014]
[142] Archives Portal Europe: Available at: https://www.archivesportaleurope.net [Accessed 25th March 2014]

> "Perhaps, then, technological change is doing something more vital to record keeping than forcing an evaluation of whether our tools and principles remain fit for purpose? Perhaps, instead, it is forcing the recordkeeping profession through the looking-glass, making it engage with some of the difficult and complex semantic and intellectual debate that has been taking place for years, but that, practically, it was possible to ignore and get on with things and continue with the worthwhile and everyday work of processing and providing access to records."

These issues of new relationships and the increasingly populist and engaging nature of the Internet are relevant to museums and libraries also. There is, however, a further dimension of particular import to the archivist. That is the flourishing of community archives engendered by the flexibility with which images, audio and documentary evidence can be integrated in the digital space.

The community history movement has its roots in the distant past and for many years and in many local studies libraries enthusiastic amateurs might be found exploring the diverse collections of images and documents. More recently, especially with recognition that community can mean things other than place, and the integrating and connecting capacities of the Internet, new forms of community history and archiving have emerged. Flinn (2007) lists examples of such histories: Black, women's, Jewish, steelworkers, and lesbian, gay, bisexual and transgender, making the important point these histories impact: "…on all our stories, and together they make up an inclusive national heritage, our national histories." (Flinn, 2007, p152.) In **Digitisation, Curation and Two-Way Engagement**, Batt (2009a, p29) highlights the catalyst provided to community archiving through Lottery funding for projects such as *Their Past, Your Future*, an inter-generational project to gather personal stories from World War II and *Moving Here,* building histories of immigration to the UK. The latter specifically engaging museums, libraries and archives in two-way exchanges with individuals and communities. Other examples of new relationships between institutions and communities of interest cited include *Hidden Histories, Connecting Histories* and *the Great War Archive*; the latter exploiting the techniques of crowdsourcing (Batt, 2009a, p31).

Flinn's paper (2007) reviews all aspects of the community archive movement, including the challenges raised by these new relationships across the 'boundary exchange'. He identifies the challenges facing the archivist as practitioner in this new setting. Pre-dating the later views of Convery above, he argues that these community relationships call for a 'post-custodial' approach to archival development where:

> "…the custody and care of collections does not occur in the formal archive itself, but happens distributed within the creating organisation where the records remain." (Flinn, 2007, p161)

This new form of externally-focused activity, calling for new relationships to be defined between all interested parties, was the theme of Vic Gray's presidential address to the Society of Archivists Conference in 2007, **Who's That Knocking at Our Door? Archives, Outreach and Community** (Gray, 2008, p6). Recognising Flinn's work reviewing the history and importance of

the community archives movement, Gray argues that the time for practitioners to defend the "mystery of archivery" against the amateur is in the past. Practitioner skills might be practiced by others without disaster. He offers two options in how to respond to the emergence of community archives:

> "We can stand aloof and unsullied by this and pour cold water on those endeavours, predicting the mass failing of images, the expiry of digital content, the death in a horrid acid brew of valuable written texts, those Bogeymen with which we frighten ourselves and others. Or we can offer help and guidance to mitigate the mistakes and misconceptions that might arise."

At that time such a stance was not universally shared. Flinn (2007, p170) cited the opinion of Lowenthal:

> "He worries that the tradition of archival and historical scholarship will be endangered now that the keeping of records has spread from government and academe to bakeries and beauticians, from heraldry experts to root-seeking hoi-polloi…"

In **Taking the Road Less Travelled**, Bailey (2007) addresses the archival challenges of digital preservation and how to make retention decisions given the "vast volume of information" flowing within the digital space. He makes the important point that while these are central concerns for the archivist and the records manager:

> "The fact that they are digital records does not replace the significance of their content…do we sometimes risk over-focusing on the technical complexities of dealing with digital information at the expense of archival management concerns based on their content?" (Bailey, 2007, p118)

His point is one that was made within both the museums and libraries literature, that new skills sets will be needed to deal with the technical details of digital assets and those skills might best be delivered from practitioners from other disciplines - something that has always been part of the archival/records management orthodoxy. For example:

> "…the techniques of paper preservation, de-acidification and inert gas encasement are not by and large carried out by archivists and records managers, but by specialist conservators." (Bailey, 2007, p119)

These are issues that are faced across all collecting institutions and offer common ground for dealing with those specialist technical issues in the future. Bailey's paper is one of few documents reviewed to recognise the potent disruptive threat to the archival practice from developments beyond the sector. He suggests that Google's development of Google Drive, an early example of cloud technology, presented, even in 2007, fundamental challenge to the future of the archivist:

> "…Google has just driven a stake through the heart of records management as we know it and announced plans to become the world's archivist for the 21st century." (Bailey, 2007, p122)

The different views about the priorities for archives, faced with socio-technical change, have continued to be explored since 2007, for example in Hill (2011), Brown (2014), the work of

Hackman (2012) on the importance of advocacy, Cook (2011) on appraisal, Anderson (2013) on the nature of the record in the 21st century and Szajewski (2013) on the use of Wikipedia to improve access to archival collections.

Just as libraries have faced direct challenges to their service models as the Internet has introduced new media and new service forms that contest directly what previously seemed a monopoly (user-driven searching 24/7 challenging the traditional role of the reference desk), so archives have had to deal with an avalanche of electronic records that in creation and storage no longer fit within the traditional regimented structures of organisations that generate formal and orderly documentary evidence. The archival literature reviewed highlights a range of views about the implications of this, but largely reflects an understanding that the future will be not be fundamentally different from the past. That the community archive movement must be recognised and that the pliable nature of erecords, both in storage and emendation, means that many of the 20th century principles of archival practice will need constant review and revision. The literature addresses issues such as the need for greater collaboration and a recognition that the role of the user/creator will be at the heart of future practice and reflects a recognition that there has been and will continue to be disruption to the traditional priorities and delivery models. As with libraries the need for a new paradigm for archival development is focused almost exclusively on the possibilities of 'what' and 'why' rather than the 'how'. The one example presenting a holistic re-interpretation of the existing paradigm is Theimer (2014) in her presentation **The Future of Archives is Participatory: Archives as Platform, or a New Mission for Archives** to the Offene Archives 2.1 conference. The presentation examined the shift from archives primarily as repositories to become 'platforms' providing the tools for users to do useful things that enrich their lives, offering a vision on a new worldview, emphasising the paramount role of the user/collection relationship.

Strategically, there is a significant difference between the archive sector in the UK and other collecting institutions; that is the important UK-wide role of The National Archives (TNA), directing policy in England and Wales and leading standards and accreditation for Northern Ireland and Scotland also. It could be argued that this situation offers a platform for a genuine transformation of archival services. It is therefore appropriate to end this section with reference to a paper by Natalie Ceeney, who was Chief Executive of the TNA during the period when the TNA was reforming to this current UK wide role. Having identified three traditional roles for archives – selection, preservation and access – Ceeney (2008, p61) argues that the 20th century archival practices set out in the early part of that century by Jenkinson must be revised:

> "If Sir Hilary Jenkinson saw the role of The National Archives in 'bringing history to life' today he would struggle to recognise the Archive he ran, and helped shape, and yet looking back, the direction of travel and logical nature of the change is clear, and largely achieved incrementally…I doubt there are any serious commentators now who would doubt that a core role, probably the core role of an archive today, is around enabling access. It is right that we spend most of our budget and most of our development investment in this area."

By way of example, Ceeney points out that from no online access to archival information at the end of the 20th Century, in 2006/07 TNA enabled 66 million electronic downloads of information. The paper visits many of the challenges identified in other material reviewed in this section, but then offers a vision of a 21st century National Archive:

> "Our shift is about redefining the role of an archive from the repository of self-defined and inherently coherent collections to an organisation concerned with the capture, preservation and management of critical information with the ultimate aim of access." (Ceeney, 2008, p66)

…and places this vision within the enabling power of the Internet to unlock resources in new ways:

> "The degree of change that the digital age has brought is impacting on all of our paradigms…Our role and function outgrew Jenkinson's paradigms a long time ago. Today's digital society requires a new response. Changing our models to reflect today's world is not just desirable; it's essential. And our model needs to shift from records to information, and from 'just for history' to 'for today, as well as tomorrow', just as it has already shifted from 'we might give you information if you ask nicely' to 'we want to engage and excite you - and bring history to life'. (Ceeney, 2008, p68)

It is from these foundations that the strategic direction for TNA reviewed in Chapter Ten has evolved.

There is one concluding comment that must be made about the review of archives literature. Ceeney's paper highlights the increasing role of online access to archives, yet neither that paper or any of the others reviewed makes any reference to the transformative impact on genealogical research that online services such as Ancestry have had, not least as aggregators for many archival and public records collections (Section 11.6.1). They have changed completely the relationship between people and their documentary histories. Ancestry is, of course, a commercial undertaking, but in the UK at least some local authorities consider it a merit good service that should be available to their communities and provide access free in public libraries. It is beyond the scope of this research to seek to justify the absence of any debate about such public/private relationships within the archives literature, but it is a topic that will be considered in Part Three of this thesis.

11.5 COLLABORATION ACROSS COLLECTING INSTITUTIONS

The final element of this literature review examines material on collective activity between clusters of different institutions. There is a relatively small body of material within this category which is dealt with in two parts. First, documents focused on the scope, value and impact of the integration of digital collections and second, material that examines the broader institutional principles, activities, challenges and opportunities of collective action, whether or not digitally driven. The former focuses on the value and approaches to digital assets of all types searchable

by the user in a common space. The second throws light on the forms of activities being undertaken and the opportunities and barriers perceived by the institutions.

The European Commission has supported research into the application of the Internet for several decades and, between 2002 and 2004, funded the Digicult Forum to examine the implications of digital innovation for cultural heritage collections; in libraries, archives, museums and galleries. The final report of the Forum's work - **The Future Digital Heritage Space: An Expedition Report** (Geser and Pereira, 2004) - presented a broad and optimistic exploration of digital cultural heritage in the future. Clearly a report published in 2004 is somewhat dated with regard to speed and impact of technological change, however, several points of note must be identified. First, in 2004 the landscape of heritage institutions and their activities was fragmented:

> "…we found many islands, with very different islanders and views of the future digital heritage space. However, there is one clear message that may summarise what we discovered, There is little likelihood of a future digital heritage space being created unless ways can be found to bring the different islands closer together". (Geser and Pereira, 2004, p8)

Second, the report gathered opinions on what might be achieved across a 15-year time horizon. One aspiration addressed the user experience:

> "…a digital community where a person can gather the information they need regardless of what kind of institution the resources are owned by. The person will not have to know where he or she is getting the information. Regardless of what role you have, a student, researcher, mother, tourist you should be able to get the right sort of resources you need at the time and in the role you have." (Geser and Pereira, 2004, p43)

Both of these points remain just as important today and just as unfulfilled as in 2004. At the same time that Digicult was exploring uncharted lands, the EU-funded CALIMERA project[143] was investigating the barriers to progress for institutions at the local level. This resulted in a policy toolkit enabling policymakers, practitioners and agents to support information gathering, engagement and advocacy (Fernie and Van Mil, 2004). One element of CALIMERA was research undertaken by the Manchester Metropolitan University-based Centre for Research in Library and Information Management (CERLIM) to identify innovative applications of the Internet in local cultural institutions across all of the 52 countries involved in CALIMERA. The outcome was recognition that there was a need to synthesise the survey data into a generalised model:

> "It was clear from our initial studies that there was little point in simply providing a list of topics requiring research and development. What was needed was a model which would enable the interconnectedness of different requirements to be established, and which would show where priorities should lie." (Brophy and Craven, 2004, p5)

The conclusion of the research was the creation of a model of the elements to be addressed (including citizens, creativity, learning, communication and involvement) in developing user-

[143] CALIMERA – Cultural Applications: Local Institutions Mediating Electronic Resources website. Available at: http://naple.mcu.es/sites/naple.mcu.es/files/calimera_fernie.pdf [accessed 18th March 2014]

centred digital services together with a roadmap of the research necessary to build successful engagement and collaboration:

- A greater focus on understanding and describing the user requirement. Local cultural institutions must be focused on their users, but these are not monochrome.
- Tools to enable users to create content together with systems that allow that content to be managed systematically and sustainably.
- Systems which couple together learning and enjoyment, placed within a clear local (and thus relevant to the user) context.
- Dissemination and communication of information about the content and services of the local institution, to users and potential users, between users (as they share the treasures that they find) and to other institutions.
- Interoperability between systems to ensure that integrated services can be offered at the point of user interaction which may be within other bodies' portfolios of services so that the institution is fully involved in the life of the citizen. (Brophy and Butters, 2007, p19)

The first bullet point above - understanding and describing user requirements – has a small body of literature focused on single institutional forms, described in previous sections. The only study that included all three types of institutions is the now somewhat dated **Digital Audiences: Engagement with Arts and Culture Online** (MTM London, 2010) that, as its title suggests embraced a wide range of cultural forms (those within the ambit of the DCMS). Co-sponsored by ACE, the MLA and Arts and Business, it was a user study along similar lines to the biannual Oxford Internet Survey. In answer to the question *what do users want from their cultural institutions online* (pp24-25) priorities for innovation in collecting institutions were:

- Learn more about exhibitions, objects and what is available;
- Take virtual tours around collections;
- Learn how to do something;
- Importance of trusted national cultural brands in the digital space.

The Digicult report, the outcomes of CALIMERA and the results of the MTM study appear to have had little impact, yet they remain relevant to strategic innovation today.
The convergence of objects once in the digital medium was a theme addressed by Bob Martin in a paper delivered at the 2003 World Library and Information Congress. Then Director of the US Institute of Museum and Library Services, he reviewed the broader landscape of co-operation across museums, libraries and archives, observing that:

> "In the digital world, all of the objects that we have access to via the Web have been imbued with the ability to speak…This leads to the inescapable conclusion that, in the digital environment, the distinctions between libraries, museums and archives that we take for granted are in fact artificial." (Martin, 2003, p4)

Convergence in the digital space is thus an important step towards enriching the user experience across the boundary exchange. There is a further matter of significance to that enriched exchange – the extent to which the digital assets are disclosed to the user in useful ways – are they findable and resolve the particular need? Echoing the Digicult report, how well connected are the islands and how easily understood their geography?

Kirchhoff, Schweibenz and Sieglerschmidt (2009, p255) using the same geographic analogy, described the German portal BAM (Biblioteken, Archiv, Museen) that provides access to German digital collections:

> "What is lacking, however, is a connection between the digital collections of the individual institutions that could serve as bridges connecting the digitization islands in the vast sea of the Internet."

Additionally, in what was a very comprehensive article on the principles, design and implementation of BAM, they provide the following justification for a single portal:

> "One of the foremost indicators of digital convergence is the blurring of distinctions between archives, libraries, museums, and other memory institutions in the virtual realm. From the users' perspective, it is of no importance where they find their information, whether it is in a book or a leaflet in the library, from a description of an artifact in the museum, or from an organisation's protocol in the archive, as long as they do find it. In the digital realm, it is no longer relevant whether the original materials are in a library or a museum or an archive. This trend sets the stage for a new institution of digital heritage, the so called ''memory institution." (Kirchhoff, Schweibenz and Sieglerschmidt, 2009, p252)

In the UK there are several developments that have focused attention on the effectiveness of this boundary exchange. Jisc has supported the development and exploitation of digital collections for more than ten years[144]. Jisc's responsibility extends both to the funding of digitisation programmes and ensuring that individual digital collections can be integrated with the aim of making the whole greater than the sum of the parts. In recent years it has placed greater attention on this latter aspect of digital developments, particularly through the work of the Resource Discovery Taskforce (RDT). The Taskforce published its vision for the future of resource discovery in mid-2010:

> "UK researchers and students will have easy, flexible and ongoing access to content and services through a collaborative, aggregated and integrated resource discovery and delivery framework which is comprehensive, open and sustainable." (McGregor, 2010, p1)

Within working papers there was consensus within the taskforce of the user-facing elements of a resource discovery framework:

- Make museum, library and archive resources visible in the wider web environment and encourage their reuse;
- Provide for personalised views of resources. (McGregor, 2009, p2)

In addition to these important points about user-facing delivery, the Taskforce identified a range of technical and organisational issues that would need to be dealt with to guarantee the successful implementation of a resource discovery framework – metadata standards, platform rather than portal and, of course, the tensions between institutional priorities and those required for any national agreement. While the work of the RDT did not produce a national solution

[144] Jisc Digitisation and Content website: Available at: http://www.jisc.ac.uk/whatwedo/programmes/digitisation.aspx [accessed 18th March 2014]

matching McGregor's vision, the UK now has several voluntary services enabling collecting institutions to disclose their digital objects. These are described in Section 11.6.2.

There is one further area of research in considering the exchanges that take place across the boundary with the user. For several years the BBC has been developing the concept of the Digital Public Space (DPS) as a common aggregator of their own and others' digital assets to create an integrated one-stop shop for cultural and learning resources. Tony Ageh, the BBC's Controller of Archive Development explains the purpose as:

> "The model of the DPS emerged from the growing realisation that the environment within which broadcasters, memory institutions and individuals were creating, distributing and storing the things they made or curated was being transformed by digital technologies, and that certain key issues were not being properly addressed. Achieving what we have in mind will take a collaborative effort, on a global scale, between all interested parties to organise their currently disorganised resources around a common purpose." (Ageh, 2013, p6)

Digital Public Spaces (Hemmett, Thompson and Ageh, 2013) as a guide to the foundations of DPS demonstrates the highly conceptual nature of the project at this stage. There is an extensive list of partners from the cultural heritage sector involved, including Arts Council England, Jisc, Tate, British Library and The National Archives, but, as Le Dieu writes:

> "The Digital Public Space has the opportunity to be the very best of the open web. As such it can inform, enrich and accelerate the social transformation from public consumption of culture to public participation in culture. Significant challenges remain before we can fully realise the Digital Public Space described in this paper. We must continue our efforts to overcome those challenges and commit to the very best of Digital Public Spaces. If not, we risk a generation for whom their cultural heritage is at best quaint and at worst irrelevant." (Le Dieu, 2013, p17)

While many of the challenges to which Le Dieu refers are to do with technical matters of formats, standards and platform design, of equal weight is a raft of challenges (alongside opportunities) associated with organisational principles, processes, priorities and practitioner attitudes to digital innovation.

Turning to the broader framing of institutional convergence within the context of organisational principles and practices, there is a range of research and writing rooted vey much in the international setting. **Public Libraries, Archives and Museums: Trends in Collaboration and Cooperation** (Yarrow and Clubb, 2008) presents a wide range of examples from 13 countries, some local, some national and international. Topics covered include: collaborative programming, collaborative electronic resources, joint use/integrated facilities and guides to collaboration. This latter section draws brief conclusions from the projects reviewed and provides some key 'dos and don'ts' when planning and implementing collaborative projects. As a snapshot it offers a useful reminder that collaboration may take place in many different ways and at different scales. Similarly, Gibson, Morris and Cleeve, (2007) present the results of a survey of collaboration between libraries and museums in the US and England, but rather than focusing on practical description the paper draws out underlying trends and drivers. Factors identified included

common missions (education/learning); the potential of digital collections to draw together dispersed collections; co-location as an important advantage; setting common, shared aims and objectives for projects; and shared agreement on target audiences. The topic of common purpose around education and learning is also the theme of **The Evolution of Library and Museum Partnerships** (Dilevko and Gottlieb, 2004, p211) that makes explicit that the future of museum and library partnerships should be grounded in the "wonder factor" of the pre-Enlightenment cabinet of curiosities to engender an educational mission rather than the "edutainment" approach of much of the mass media focused on quantity not quality:

> "The library and museum no longer can exist qua library or museum, that is, as an institution with wondrous educational resources based on expertise and scholarship – an institution that leads to contemplation of and critical enquiry about important issues. Rather, the argument goes, it must, by means of edutainment, be turned into a 'public space', as if libraries and museums that exist as rigorous learning institutions are somehow not public space."

While there is much to disagree with in the book, not least the failure to recognise that the digital space and the physical space can be and do different things, the richly argued case for the need for distinctiveness between the institution and the mass market is a factor that needs consideration as collecting institutions move more into the digital space.

There is one final piece of practical research to be considered in this section. In 2005 the US Research Libraries Group (RLG) organised a forum on the convergence of collecting institutions - **Libraries, Archives and Museums – Three-Ring Circus, One Big Show?** (RLG, 2005). In 2006, when RLG joined OCLC[145], a programme was initiated to research further possible approaches to convergence. The subsequent report, **Beyond the Silos of the LAMS,** published in 2008, builds on a continuum of relationships that range from co-ordination and co-operation through to deep collaboration defined by Ken Soehner at the 2006 Forum:

> "In Ken's words (inspired by the circus-themed forum title), collaboration engenders 'a transformational change that is akin to letting go of one trapeze in midair before a new one swings into view', and that transformative impact on participating institutions distinguishes it from the more 'additive' nature of coordination/cooperation…this report extrapolates Ken's useful observation into a continuum of possible LAM interactions with increasing transformative power, risks and rewards." (Zorich, Waibel and Erway, 2008, p5)

The OCLC study was a practical test bed for joint action between museums, libraries and archives within 'campus' institutions (three collecting institution types operated with the same parent organisation). These included Edinburgh University, Princeton University, Smithsonian, Victoria and Albert Museum and Yale University. Projects explored the use of digital technologies to increase user access to an integrated content base of material within the institution. Each project involved a workshop that enabled local and general principles to be derived. The report presented a range of generic issues to be taken into account – vision,

[145] OCLC website. Available at: http://www.oclc.org/en-UK/home.html?redirect=true [accessed 24th March 2014]

mandate, incentives, change agents, flexibility and trust – but did not come to any full and final conclusions. Alongside project successes, the report offered a salutary reminder of barriers to be surmounted. It included a list of some of the reasons why some potential project institutions decided not to engage (Zorich, Waibel and Erway, 2008, p20):

- The idea was not of great enough importance;
- The idea was premature;
- The idea was not within the purview of libraries, archives and museums;
- The idea was too overwhelming.

Subsequently, the RLG forum and the OCLC research were reviewed together by Waibel and Erway (2009) to derive a more generalised context for development beyond institutions within the same campus. Many of the same issues reported from the campus-based research were clearly relevant, but a key transformative requirement within a more open context of different 'islands' should be to *act locally while thinking globally*. The concluding paragraph of Waibel and Erway's paper provides a useful link to the process of synthesis of Part Three:

> "Collaboration changes behaviors, processes, and organisational structures, and leads to a fundamental interconnectedness and interdependence among the partners, making this transformative change the hallmark sign by which true collaboration can be known. Those transformative activities are what will put LAMs in position to take advantage of economies as well as technology and in turn become a transformative force for their audience." (Waibel and Erway, 2009, p334)

11.6 KEY EXEMPLARS OF DISRUPTIVE AND TRANSFORMATIONAL INNOVATION

The intention in identifying exemplars of innovation is not to produce a comprehensive catalogue. It is likely that others, invited to produce such a list, would produce different, equally valid examples. Within the research processes of analysis and synthesis the intention is to expose an understanding of the differences and similarities between innovation in the outer world and the inner world of collecting institutions. Section 11.6.1 summarises a number of outer world projects, the majority of which have been described earlier in Part Two. That is followed by a list that summarises projects and services focused on collecting institutions. They address the impact of technology on organisations and users rather than simply using innovative technology. For example, the development of 3D printing and increasing capability of mobile platforms, while important, are means rather than ends. All the exemplars are assessed against four evaluation features (Table 11.4 below) comparable to those applied to the assessment of policy documents in Chapters Eight, Nine and Ten.

Comparisons across such examples cannot be fully objective since in terms of purpose, scope and scale they are all different. As with the assessment of policy documents the scoring was done following the review of all the projects to provide as much consistency as possible. The

intention is to offer some practical examples that illuminate the individual nature of such projects and to disclose whether there are differences between the inner world and the outer world.

EVALUATION FEATURES	
A	Socio-tech change producing radically new service formulations
B	Centrality of the consumer in design and delivery of service
C	Consumer scale and impact
D	Support new links across different collecting sectors
SCORING	
	1 = high
	2 = potential
	3 = unlikely
	4 = unclear

Table 11.4 *Assessment criteria for exemplars*

11.6.1 DISRUPTIVE/TRANSFORMATIONAL INNOVATION IN THE OUTER WORLD

1. AMAZON	A	B	C	D
See Chapter 4.3.2 for background details. **INNOVATION IMPACT**: Amazon has led the way in the development of online retailing and the science of consumer management together with extremely high levels of customer service. Online trading has had major impact on the High Street and the ready access to low cost ebooks and discounted print material has challenged the monopolistic status of the library. Recommender services, for example, are becoming a feature of some library OPACs.	1	1	1	2

2. ANCESTRY	A	B	C	D
One of a number of genealogical aggregator services that have taken advantage of the increasing amount of digitised archival resources to build user-friendly, one-stop front end services that take the 'leg work' out of discovering family histories. By the end of 2013 Ancestry provided access to almost 13 billion records and had two million subscribers*. **INNOVATION IMPACT:** Services such as Ancestry and Findmypast are perhaps the only genuine examples of transformative innovation that have taken place within collecting institutions. While the archival sector has, as noted previously, created record finding aids only, these commercial services have built mass audiences through the bringing together of many different record forms, providing tools to build family history together with social recommender services for potential linked records and other researches engaging with the same family records. UK archival records in museums, libraries and archives are widely available on Ancestry, and Findmypast reports close collaboration with The National Archives, The British Library and the Royal Archives**. New patterns of use have been created that have changed the relationship between the user and the physical archive. A number of local authorities have taken out subscriptions to Ancestry so that it can be made available in public libraries free of change as a merit good service. (Clark, 2014) * http://en.wikipedia.org/wiki/Ancestry.com ** http://www.findmypast.co.uk/content/start-your-family-history/why-choose-findmypast	1	1	1	1

3. BLOGGING AND SOCIAL MEDIA	A	B	C	D
Self-publishing and communication tools freely available to all online users. **INNOVATION IMPACT:** Radical changes brought about in the sharing of information, opinion and news. Successful mechanisms for influencing public policy through services such as Twitter and the engagement of the public in crowdsourcing projects both in the public and private sectors.	1	1	1	1

4. EMAIL	A	B	C	D
So widely used for so long, email is an invisible, but essential requirement for business, leisure and social activity. **INNOVATION IMPACT:** Has changed completely patterns of communication creating virtual interest groups and supporting the potential for more efficient and user-friendly communication services in both the private and public sectors	1	1	1	1

5. FLICKR	A	B	C	D
Image sharing services allowing wide access to members' images under their own control. When launched a 'game changer', but while still very popular it is one of many image-sharing sites on the Web. **INNOVATION IMPACT:** Already used by a number of collecting institutions to disclose images and encourage audience participation image sharing sites have not been taken up widely as a means of drawing together hybrid collections from many different institutions particularly to generate individual and community engagement.	1	1	1	2

6. GOOGLE	A	B	C	D
Essential search tool for a high percentage of the population, now dealing globally with about 12 billion searches a month*. Every organisation wants to be top of the hit list. **INNOVATION IMPACT:** The development of Google Knowledge Graph in 2012 has added a gloss of instant information for the searcher, reducing the need, in many cases, to sort through the hit list. This has implications for the disclosure and discovery of collecting institutions' resources. Google is a competitive environment that might run contrary to the opportunities for institutions to aggregate their collections while maintaining their own brand identity. * http://expandedramblings.com/index.php/by-the-numbers-a-gigantic-list-of-google-stats-and-facts/	1	1	1	2

7. GOOGLE BOOKS	A	B	C	D
Front end for the Google programme of digitising library collections and now also including the eversions of much newly published material. Google Books* has not been without controversy, but remains a massive and expanding collections of books. **INNOVATION IMPACT:** Access to one of the largest databases of printed books, much of the material either available in full text or full text searchable. Important addition to the resources of researchers. * http://books.google.com	1	2	1	1

8. GOOGLE CULTURAL INSTITUTE	A	B	C	D
Google Cultural Institute is a recent development building on the Google Art Project to produce high quality interactive images and videos of exhibitions from many different museums and libraries across the globe. **INNOVATION IMPACT**: While Google Cultural Institute is of high quality and deals with traditional collections in completely new ways, it has not yet offered any direct challenge to the existing service models in collecting institutions. What it is able to demonstrate is a new approach that may be applied to the integration and exploitation of collections in the digital space, perhaps offering clues to those collecting institutions of how in the future they might better exploit digital collections. * https://www.google.com/culturalinstitute/home	1	1	2	1

9. GOOGLE SCHOLAR	A	B	C	D
Google Scholar* "…provides a simple way to broadly search for scholarly literature. From one place, you can search across many disciplines and sources: articles, theses, books, abstracts and court opinions, from academic publishers, professional societies, online repositories, universities and other web sites. Google Scholar helps you find relevant work across the world of scholarly research. • Search all scholarly literature from one convenient place • Explore related works, citations, authors, and publications • Locate the complete document through your library or on the web • Keep up with recent developments in any area of research • Check who's citing your publications, create a public author profile" **INNOVATION IMPACT:** A powerful search and management tool for the academic and researcher * http://scholar.google.co.uk/schhp?hl=en	1	2	1	1

10. ITUNES/ITUNES U	A	B	C	D
Introduced by Apple in combination with the iPod, iTunes transformed the recorded music business, redefining the purchase of music in terms of tracks rather than albums. (See Chapter 4.3.2.) iTunesU, a subset of iTunes, was created to manage, distribute, and control access to learning resources. Institutions can create their own iTunes U site, which facilitates searching for material. The online service is free for uploading or downloading material including lectures, language lessons and lab demonstrations from colleges, universities, museums, libraries and other cultural institutions of educational value. **INNOVATION IMPACT**: The Open University in the UK set the record for the most downloads as of October 3, 2011 having reached 40 million downloads. In late February 2013, iTunes U surpassed one billion downloads from more than 800 institutions*. iTunesU represents an opening up of learning resources, providing access to learners beyond the academy. It was a precursor to the MOOC movement and also sits alongside YouTube as a significant medium for the delivery of information and knowledge. Overall increasingly open access to learning resources may have significant impact on formal learning institutions and their collecting institutions and in the ways in which museums, libraries and archives generally engage with learning. * http://www.apple.com/pr/library/2013/02/28iTunes-U-Content-Tops-One-Billion-Downloads.html	1	1	1	2

11. WIKIPEDIA	A	B	C	D
The people's encyclopaedia; the exemplar of community co-production. A giant database of information and knowledge. **INNOVATION IMPACT:** The huge scope of Wikipedia and its ability to respond quickly to breaking news has caused the demise of the traditional printed encyclopaedia. While as in any community there are disagreements and extended debates, Wikipedia remains globally one of the leading tools of reference. Its 24/7 availability, topicality and scope has challenged directly aspects of the library reference desk. At the same time museums* and other cultural agencies** have been exploring the ways in which Wikipedia can be exploited as a tool of disclosure and discovery for collections, engaging the user community. * http://en.wikipedia.org/wiki/Wikipedia:GLAM/British_Museum ** http://www.nbcbayarea.com/news/weird/UC-Berkeley-hires-first-Wikipedian-in-residence-250780881.html	1	1	1	1

12. WOLFRAM ALPHA	A	B	C	D
Computational knowledge engine. "Wolfram Alpha introduces a fundamentally new way to get knowledge and answers. Our goal is to build on the achievements of science and other systematizations of knowledge to provide a single source that can be relied on by everyone for definitive answers to factual queries. Wolfram Alpha aims to bring expert-level knowledge and capabilities to the broadest possible range of people - spanning all professions and education levels."* **INNOVATION IMPACT:** While not achieving the user reach of other search tools, Wolfram Alpha's ability to interpret natural language requests to search and undertake sophisticated calculations on large databases presents a range of opportunities for the future of information and knowledge management. It has fulfilled mainly a niche use within the statistical and scientific communities, but is extending into demographic and social data. This may have significance for both libraries and archives in the machine-based analysis and exploitation of their collections. * https://www.wolframalpha.com/about.html	1	2	2	4

13. YOUTUBE	A	B	C	D
Ubiquitous video-sharing service. Alongside entertainment there are learning resources, instructional videos on solving technical problems, making recipes and developing new skills. YouTube has global reach and use. Each month: • More than 1 billion unique users • Over 6 billion hours of video are watched • 100 hours of video are uploaded to YouTube every minute* **INNOVATION IMPACT:** The instructional material on YouTube while presenting similar issues of quality to those of Wikipedia offers unparalled access to resources to support self-help and learning. This offers challenge and opportunity to the information provision and learning roles of collecting institutions. For example, high use and easy accessibility to instructional and entertainment material offers collecting institutions the chance to engage new audiences, but also risks reducing the demand for destination visits as the convenience of online access outweighs the overheads of travel. * http://www.youtube.com/yt/press/statistics.html	1	1	1	2

11.6.2 DISRUPTIVE/TRANSFORMATIONAL INNOVATION IN COLLECTING INSTITUTIONS

1. CULTURE GRID	A	B	C	D
"Culture Grid is a unique online aggregator service from Collections Trust: joining and opening up UK collections for more use by more people in more ways. It is key to Collections Trust's promoting of *excellence in collections* and our aim to help organisations share their collections online safely and sustainably"*. **INNOVATION IMPACT**: Potential to create greater accessibility to image collections across the UK * http://www.culturegrid.org.uk	2	3	4	2

2. DIGITAL PUBLIC SPACE	A	B	C	D
BBC-led cultural assets aggregator and discovery service (still in the planning stage) **INNOVATION IMPACT**: Progress on the Digital Public Space project was described in Chapter 11.5. While (in March 2014) it has yet to move to the stage of Beta testing, the potential for the creation of a single managed space for a wide range of digital resources, including the extensive BBC archives, could prove a disruptive innovation for collecting institutions.	2	4	2	2

3. DISCOVERY (THE NATIONAL ARCHIVES)	A	B	C	D
Discovery is The National Archives' primary online search tool. It holds more than 32 million descriptions of records held by The National Archives and more than 2,500 archives across the country. Over 9 million records are available for download*. Discovery builds on the pre-existing A2A collections-level service identifying holdings in archives across the country**. Along with that material, Discovery provides access to a large number of digital objects in its holdings, making it a hybrid resource since for some records found in a search full access to digital objects is available while for others the result merely returns details of the location and opening times of the remote archive. In addition it should be noted that for many of the TNA records that are downloadable, a significant charge is made. **INNOVATION IMPACT**: In its present form, Discovery is neither disruptive nor transformational. Its inclusion here is due to the combined facts that there is, at least, the potential to evolve the platform to offer greater countrywide 'findability' at item rather than collections level, and that the leading strategic role that TNA for archive development in England and Wales (plus influence in Northern Ireland and Scotland) means that a collective approach to innovation might be possible. * http://discovery.nationalarchives.gov.uk ** http://a2anetwork.co.uk/a2a-network/a2a-terms-of-reference/	2	4	2	2

4. EUROPEANA	A	B	C	D
"No need to travel the continent, either physically or virtually!"* Europeana is a major European Commission led project to build a Europe-wide aggregator for digital content in museums, libraries and archives. It has around 25m objects online and a wide range of development programmes to build new tools and services. Until now it has focused more on building the database and developing technical solutions than detailed study of the end-user; also, institutional engagement has varied widely across the countries of Europe. **INNOVATION IMPACT:** If Europeana is able to gain a critical mass of resources from the UK that can be presented to users in meaningful ways, it could have a transformative impact on the accessibility of the holding of UK museums, libraries and archives. Europeana is now disclosing many of its freely licenced educational images on to Wikimedia Commons for public use**. * http://blog.europeana.eu/2014/08/helping-cultural-heritage-institutons-get-their-content-on-wikipedia/ ** http://www.europeana.eu/portal/aboutus.html	1	2	2	2

5. PEOPLE'S COLLECTION WALES	A	B	C	D
National aggregation of images from museums, libraries, archives, individuals and community groups across Wales. People's Collection Wales website* draws together the digital collections of the main heritage institutions in Wales, alongside content from smaller museums, archives and libraries, and is a place where you can contribute your own content to enhance the variety on the site and make sure that the history of your area is told. The Welsh Government funds the project. It is a partnership between Amgueddfa Cymru - National Museum Wales, The National Library of Wales, the Royal Commission on the Ancient and Historical Monuments of Wales, Llafur: The Welsh People's History Society and involves many other partners such as BBC Cymru Wales, Eisteddfod Genedlaethol Cymru, CADW, Visit Wales, Ramblers Cymru, S4C and others. **INNOVATION IMPACT**: People's Collection Wales is included for the two reasons also provided for TNA's Discovery service. At this stage of its development it does not manifest the characteristics of disruptive or transformational change, but given the commitment of the Welsh Government and the support of leading institutions, in the longer term it offers the potential to change significantly the management of digital assets in collecting institutions in Wales. * http://www.peoplescollectionwales.co.uk	2	4	2	2

6. JISC	A	B	C	D
Included here not for one project, but a number of activities in research and development over the past fifteen years. Important examples include: **Digital content programmes:** Significant investment in the digitisation of HE collections since 2000, together with collective negotiation of supply of ejournals and other resources for HE/FE through Jisc Collections. Wide range of digitisation projects funded, some with partnership as a priority and some involving institutions outside the HE/FE sector.* **Strategic Content Alliance:** An informal grouping of UK institutions (BBC, ACE, British Library, Heritage Lottery Fund, Wellcome Library) in existence for over 10 years with an interest in examining ways that collecting institutions might be encouraged to work more closely together. **Jisc's National Monograph Strategy Roadmap**, while focused on a particular sub-set of collections, again highlights radical new thinking in the ways that collections are built and disclosed. It describes a five-year vision for an open, national collaborative infrastructure: • "Collaboration - fostering collaboration between, and within, sectors to create the most effective framework for managing monograph collections old and new. • Experimentation – developing opportunities to test and experiment with new models and formats. • Intelligence – enabling institutions, organisations and individuals to make the right decisions through improved data sharing. • Strategy - reducing overheads, enabling agreements and policies and sharing infrastructure. • Systems integration - reducing and streamlining the number of systems and processes to minimise duplication of assets, resources and effort. • Service provision - designing services which ensure a shared, cost effective and transparent approach to managing monograph collections. • Providing benefits to end users - developing effective metrics to better understand what users do with monographs and evaluate new and emerging needs in the light of digital delivery." (Showers, 2014, p25) **INNOVATION IMPACT:** The Jisc has had significant impact in creating increased access to collections within HE/FE and other institutions. It has also co-ordinated discussion about digital innovation across different collecting institutional forms. While these are significant developments the Jisc has been unable to lead formally collaboration which means that wider disclosure of resources has not been consistent, not least since Jisc's primary client group is HE/FE institutions and their audiences. * http://www.jisc.ac.uk/content ** http://sca.jiscinvolve.org/wp/	1	2	2	2

7. YOUR PAINTINGS	A	B	C	D
"Your Paintings is a website which aims to show the entire UK national collection of oil paintings, the stories behind the paintings, and where to see them for real. It is made up of paintings from thousands of museums and other public institutions around the country. Your Paintings is a joint initiative between the BBC, the Public Catalogue Foundation (a registered charity) and participating collections and museums from across the UK. There are over 200,000 oil paintings in the UK's national collection. To give a sense of the scale of the collection, the National Gallery in London has around 2,300 oil paintings. So it's nearly one hundred times the size of that. The collection includes works by some of the greatest painters of the last 700 years, as well as paintings by thousands of lesser-known artists. It offers a remarkable insight into the history, landscape and culture of the United Kingdom."*				
INNOVATION IMPACT: The origins of the Your Paintings project was a comprehensive photographic survey of all oil paintings in public ownership with the aim of publishing printed catalogues covering every county in the United Kingdom. All the images were high resolution digital so that the translation of the mission from print catalogues to the creation of an online resource was a relatively simple one to make. That itself was a transformative innovation since it was then possible to publish the whole collection immediately and, in collaboration with the BBC, set up a major crowdsourcing programme to research in depth the database of 200,000 images, a great many of which had no provenance. That work continues as a model of an innovative approach to managing an image collection in an engaging way. A model that might be readily extended to embrace other collection forms. For the wider community of collecting institutions, therefore, Your Paintings presents a disruptive form of innovation that would allow for broader experimentation in how digital collections might be exploited in the future. * http://www.bbc.co.uk/arts/yourpaintings/about/	1	1	2	1

11.6.3 COMMENTARY ON THE EXEMPLARS

As noted earlier, this is a sample so is neither representative of all innovation, nor amenable to fully objective comparison. Chapters Four and Six especially have shown the constraints on the public sector and the competitive outer world where there is incentive to take risk. The summaries and the scores do highlight, with one exception, that the outer world examples all represent disruptive and/or transformational service change while, with one exception, the collecting institution examples do not. The exception is the Your Paintings project that has already demonstrated a disruptive approach, defining a possible new future for collections disclosure. It is a hybrid project that engages with a wide range of collecting institutions to build a comprehensive database, but initiated and managed externally to collecting institution practices, echoing Parry's comments in Section 11.2 concerning the future emergence of a *digital heritage diaspora* (Parry, 2013). This difference between the two sets of exemplars is apparent in the summary table of the scores shown below:

	OUTER WORLD EXEMPLARS	A	B	C	D
A Socio-tech change producing radically new service formulations B Centrality of the consumer in design and delivery of service C Consumer scale and impact D Support new links across different collecting sectors	Amazon	1	1	1	2
	Ancestry	1	1	1	1
	Blog/social media	1	1	1	1
	Email	1	1	1	1
	Flickr	1	1	1	2
	Google	1	1	1	1
	Google Books	1	2	1	1
	Google Cultural Inst	1	1	1	2
	Google Scholar	1	2	1	1
	iTunes/iTunesU	1	1	1	2
	Wikipedia	1	1	1	1
	Wolfram Alpha	1	2	2	4
	YouTube	1	1	1	2
	Total	13	16	14	21
	Average (n=13)	1	1	1	1.6
1 High 2 Potential 3 Unlikely 4 Unclear					
	INNER WORLD EXEMPLARS	A	B	C	D
	Culture Grid	2	3	4	2
	Digital Public Space	2	4	2	2
	Discovery (TNA)	2	4	2	2
	Europeana	1	2	2	2
	Jisc	1	2	2	2
	People's Coll Wales	2	4	2	2
	Your Paintings	1	1	2	1
	Total	11	20	16	13
	Average (n=7)	1.5	2.8	2.2	1.8

Table 11.5 *Summary of exemplar scores*

The scores show the relative differences between the two sets of examples and while they do not, alone, present justification for radical change, they underline how success comes from new developmental models. The summaries also show that collecting institutions may increasingly be challenged from external services - Google's portfolio and Wikipedia are obvious examples - unless they begin to think beyond the H1 status quo approach to research and innovation that has predominated in the various sections of this Chapter.

Comment must also be made about two development programmes launched towards the end of 2014. The Carnegie Library Lab programme aims to enhance "…innovation and leadership in public libraries"[146] through a learning programme, project funding, mentoring and a support network. Currently there are seven practitioners on the programme in the UK and Ireland. The Museums Association's Transformers programme focuses on "radical change in museums"[147] and currently involves 19 participants who, "are challenged to develop new ways of thinking, and supported throughout to engage with experimental ideas, fresh thinking and learning from the experience of experts and innovators." There is a core development programme, coaching

[146] Carnegie Library Lab website. Available from: http://www.carnegieuktrust.org.uk/changing-minds/knowledge---culture/the-future-of-libraries/carnegie-library-lab [Accessed 3rd March 2015]
[147] Museums Association website. Available from: http://www.museumsassociation.org/professional-development/15042014-transformers-radical-change-in-museums [Accessed 3rd March 2015]

and personal developmental activities. Both programmes are highly commendable in supporting the development of new ideas and ways of thinking, but from published evidence so far and discussions with those organising the programmes it seems that both remain firmly within the H1 sustaining curve, reflecting the conclusions drawn from the exemplars of Section 11.6.2.

11.7 CHAPTER SUMMARY

Previous chapters of Part Two have shown that for reasons of both operational necessity and practitioner worldviews most developmental attention has been focused on the short to medium term, grounded in a belief that the existing organisational structures and processes will continue to exist relatively unchanged; the status quo model. It is, therefore, unsurprising that on close examination of the almost 300 documents traced during the literature search, the vast majority addressed issues intended to sustain that status quo model through the improved design and application of technology to operational processes, the use of Web 2.0 social tools and transactional services. At the same time the fact that over 75% addressed tangible problems within existing service frameworks reinforces the focus on short to medium term practices, a focus that Schön describes as *technical rationality,* bringing with it the risk that the wider context of the problem is lost:

> "But with this emphasis on problem solving we ignore problem setting, the process by which we define the decision to be made, the ends to be achieved, the means by which may be chosen. In the real world problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling and uncertain..." (Schön, 1991, p40)

The small number of papers that do concentrate on "problem setting" address subjects including horizon scanning, new applications, the future, and reflection on long-term purpose.

Across the three sets of institutional documents, the picture that emerges is one of similarities and differences. The three museums conferences (Leicester University, 2013; Souhami, 2014; Merritt, 2014), the two papers by Mathews (2012, 2014) on the need for entrepreneurial innovation in libraries, (Dempsey, Lavoie and Malpas, 2014b) on the need to change the relationship between the collection and the user, and Theimer (2014) on the archive online as a platform rather than simply a fixed destination, are the only documents providing serious reflection on how service paradigms might need to change in the future. Change driven socio-technical determinism or, more fundamentally, external challenge to the purpose of collecting institutions in the 21st century.

It is evident all sectors are engaging with the Internet to sustain services, but it is within libraries that the use of digital techniques for service management and transactions have been most normalised. The focus of museums literature by contrast places far more emphasis on the principles of service and collections management with digital developments in support. For archives the online disclosure of collections has clearly had significant impact on the major collections, particularly through the involvement of commercial organisations such as Ancestry

and FindMyPast. However, it is interesting to note that such new hybrid relationships receive no mention in the archives research literature.

Concerning the boundary exchange - the relationship between the user and the collection/service - in the museum and archive literature reviewed the user/visitor is certainly considered as a component on the institutional agenda, but is considered in the generic way that the user is prioritised in the **Museums Change Lives** report (MA, 2013a) - see Chapter 9.10. By contrast user studies within the library community, particularly within academic libraries, have been more widely undertaken, although significant change as a result of such studies has yet to be reported. Across all collecting institutions the long-term effects on service propositions of new user needs and behaviours have yet to be explored in depth.

The documents reviewed in Section 11.5 – collaboration across collecting institutions – offer a much more focused picture of the potential value of convergence, whether in theory (Digicult, 2004), developmental research (Hemment, Thompson and Ageh, 2013; Zorich, Waibel and Erway, 2008; Brophy and Craven, 2004) or an operational service (Kirchhoff, Schweibenz and Sieglerschmidt 2009). On the other hand, there are several cautionary matters that must be raised. First of all, the documents reviewed in Section 11.5 represent a very small percentage of all the literature examined, and second, none of the material seems to have had any wider impact on policy or priorities for innovation. Furthermore, the reasons given by institutions for not engaging in the OCLC project (Zorich, Waibel and Erway, 2008) are a salutary reminder of the task that will be needed to change practitioner perceptions. This is also apparent in the two studies examining innovation in museums (Vicente, Camarero and Garrido, 2012; Arts Council England, 2013b) both of which highlighted the lack of motivation in practitioners to consider radical change.

Finally, consideration of the practical examples of disruptive and transformational change in Section 11.6 reflects the status quo, sustaining approach to innovation that has been paramount in the rest of this chapter. For collecting institutions, research and innovation remains firmly rooted in the Institutional Paradigm.

PART THREE
Meaning and Possibilities

CHAPTER TWELVE
Introduction to Part Three

12.1 CHAPTER PURPOSE

This chapter introduces the tasks of Part Three. It draws on Part Two evidence to produce a meta-narrative that defines opportunities and challenges for collecting institutions, and options for reformulating service paradigms for the successful exploitation of the Internet. These tasks are delineated by the five Research Objectives in Table 12.1:

RO 6	Develop a limited number of major factors influencing the current behaviours, opportunities and challenges for collecting institutions
RO 7	Create a mission statement relevant to all collecting institutions to influence collectively government policy
RO 8	Establish the readiness potential of collecting institutions and practitioners for dealing with the speed and diffusion of socio-technical change
RO 9	Create a conceptual model of a service paradigm for collecting institutions to deliver maximum value using the Internet
RO 10	Prepare a Dissemination Plan and recommendations for future actions and benefits for the users of the conceptual model

Table 12.1 *Part Three Research Objectives*

12.2 CONTEXT OF PART THREE

In Part Two phenomena relevant to the Research Hypothesis were identified and analysed. Ajjawi and Higgs (2007, p624) refer to this as the creation of "first order constructs": theories enabling basic understanding through the capture of meaning. Extensive summaries of the phenomena provided assessment and comparative analysis of shared themes of similarity and difference from Part Two, (see Appendices 12.1 to 12.6). These enable the abstraction of first order constructs into more systemic "second order constructs using the researcher's theoretical and personal knowledge" (Ajjawi and Higgs, 2007, p624). In Van Manen's words:

> "…to bring to the essence of a lived experience an interpretative descriptive text that continues to acknowledge the complexity of that experience." (Van Manen, 1990, p18)

The significance of hermeneutic phenomenology as the underlying methodology increases in Part Three's processes of synthesis. If phenomenology is:

> "The study of lived experience in the life-world. The inquiry…attempts to unfold meanings as they are lived in everyday existence." (Laverty, 2003, p4)

…the systemic character of hermeneutics makes possible:

> "The examination of data…to discover insights into the experience." (Finch, 2008, p69)

This progression addresses the final three stages (4,5 and 6) of Ajjawi and Higgs' schematic described in Chapter Two:

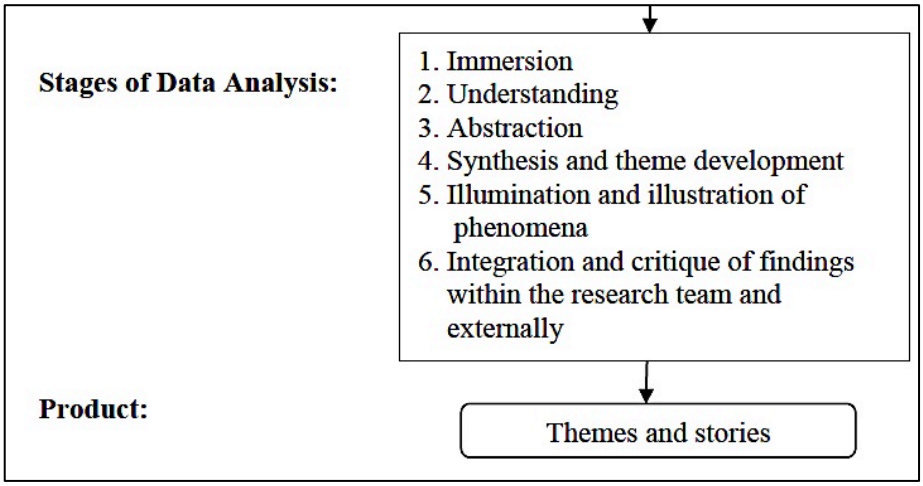

Table 12.2 *Hermeneutic phenomenology and the stages of data analysis (Ajjawi and Higgs, 2007, p614)*

Synthesis, Stage Four, represents the more structured aggregation of common themes through iterative analysis of the original evidence and processes of reflection. Illumination and illustration of phenomena, Stage Five, relate to the modelling described in the thesis's Research Objectives and, finally, the tasks of Stage Six, the "critique of findings", involves creating the means of testing the evidence through wide consultation. While such testing is beyond the scope of the research, Chapter Sixteen provides a dissemination plan, a process map and possible outcomes for debate and further action.

12.3 STRUCTURE OF PART THREE

Table 12.3 below summarises the overall process of narrative synthesis and theme identification of Part Three:

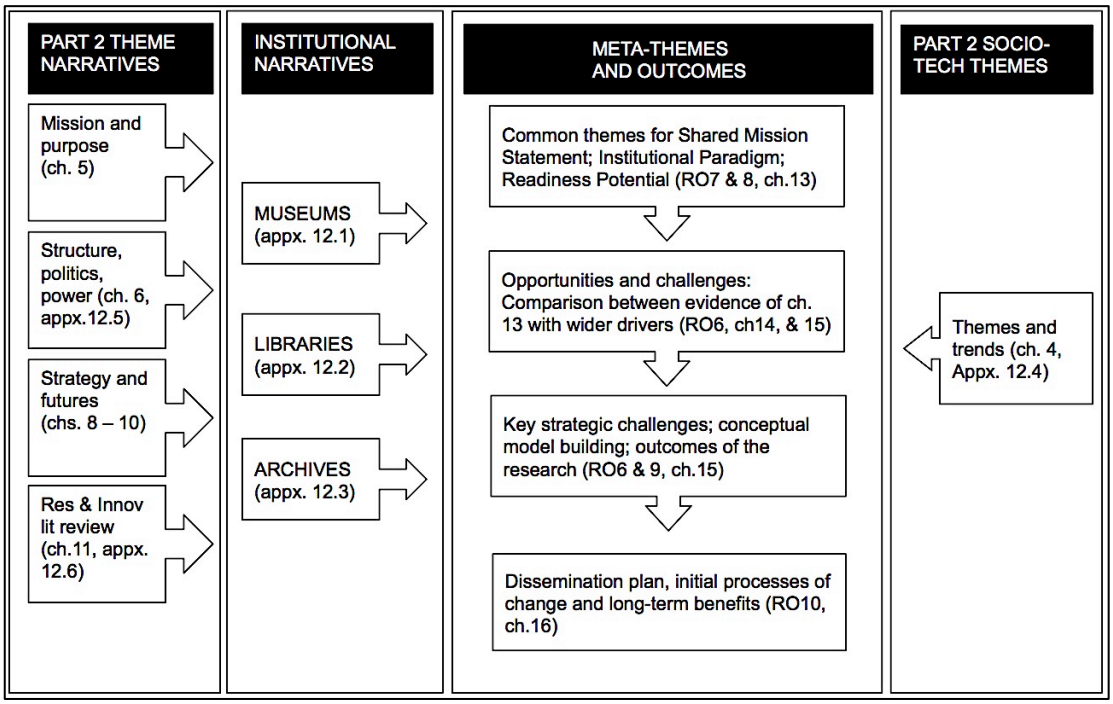

Table 12.3 *Schematic of the stages of Part Three*

The diagram shows how the evidence of Part Two flows into Part Three and the way in which the chapters focus on the five Research Objectives. Chapters Thirteen, Fourteen and Fifteen shift from the detailed investigation of phenomena within the three types of collecting institution to the distillation of key themes and stories meaningful to all three bodies of practitioners - the meta-narrative. Chapter Sixteen describes both how the outcomes of the research might be taken forward and possible benefits that might be achieved through collective action.

CHAPTER THIRTEEN
Collecting Institutions: Similarities and Differences

13.1 CHAPTER PURPOSE

Chapter Thirteen addresses Research Objectives 7 and 8 (see Chapter 12.1) drawing three conclusions from Part Two evidence:

- Consider what common ground collecting institutions occupy within public service and whether it might be possible to develop a Shared Mission Statement based on the Chapter Five textual analysis.
- Establish whether, or to what extent, the Institutional Paradigm described in Chapter Six has evolved in response to the emerging Network Society.
- Ascertain whether practitioners demonstrate a clarity of thought and purpose to respond to the impact of socio-technical change: their readiness potential.

It is not a recapitulation of all of the evidence of Part Two, but harvests from the summary documents referred to in Chapter Twelve (Appendices 12.1 – 12.6), to produce a meta-narrative on collecting institutions that is then compared with wider social and technical change in Chapter Fourteen.

13.2 TOWARDS A SHARED MISSION STATEMENT

Chapter Five - Institutional Mission and Purpose - set out to examine two themes associated with Research Objective 3. First, the extent to which collecting institutions make explicit their purpose within public policy and how that purpose might be sustained and enhanced in the future (the mission) and second, the feasibility from that evidence of creating a Shared Mission Statement common to all institutions. Both the Mission Statement Survey and the Documentary Review ended with a summary of the conclusions derived from the processes of word analysis and categorisation presented in Table 13.1 below:

MISSION STATEMENT SURVEY
• Only around 40% of collecting institutions surveyed provided a public statement of mission on their website. • Within each of the institutional forms there are shared vocabularies and broadly common priorities in their mission statements. • Archives place greater emphasis on the collection rather than how it is presented, used and the value delivered.
DOCUMENTARY REVIEW
• Across collecting institutions there are differences in the priority given to curatorial functions, libraries being at the lower end and archives at the higher end. • The significance of Presentation of the collection to all institutions. • The lower priority placed by archives on Use/effect. • If the dictionary definitions are discounted from the datasets, the patterns of data shown in the Documentary Review are similar to those of the Mission Statement Survey. • National standards schemes for museums and archives set different priorities from the professional agency and policy datasets. • The fact that the dictionary definitions reflect a very different perspective to the other datasets raises the question of how much of a gap there might be between the perceptions of what is a museum, library or archive in the mind of the practitioner and in the mind of the citizen.

Table 13.1 *Conclusions from Mission Statement Survey and Documentary Review*

This section builds on the concept of 'similar stories with different voices' of Chapter 5.5.ii. The concept was derived from the tagging of words from all collecting institutions into five common categories. Word frequency patterns demonstrated that while there were differences in vocabularies, just under 90% of tagged words could be accommodated within the four practice-related categories - Curation, Range, Presentation, and Use/effect:

		Collection		Boundary exchange		
		CURATION	RANGE	PRES	USE/EFF	OTHER
DOC	Libraries	2	22	36	31	9
	Museums	18	14	33	16	19
	Archives	30	24	22	10	13
MISS	Libraries	3	18	36	36	7
	Museums	10	29	24	26	11
	Archives	18	39	23	15	6
	Total	81	146	174	134	65
	Overall %	14	24	29	22	11

Table 13.2 *Percentage distribution of analysed words within categories*

That the data show there is significant convergence around the building of collections and making those collections available for useful purposes (boundary exchange) may not appear a very profound conclusion. If publicly funded museums, libraries and archives did not collect

things that might be useful at some future time they would not, by contemporary dictionary definitions, be museums, libraries or archives. Yet in seeking to derive a Shared Mission Statement there are two tasks to be achieved. First, to establish whether it is reasonable to conclude that the data are telling 'similar stories' and, second, whether it is possible to create a shared vocabulary for the 'different voices'. While the conclusions of interpretive research cannot be objectively definitive, the patterns of word distributions described above and in Chapter Five pointed towards the three institutional forms sharing an underlying 'collective' purpose: the data do tell similar stories.

The second task, of establishing the means to find acceptable language, requires a further stage of analysis, focused on the words in the Boundary Exchange category. The definition of the mission statement in Chapter 5.2.1: "It should answer such vital questions as: why do we exist, what is our real purpose and what are we trying to accomplish" (Bart, 2001, p360) emphasises outward rather than internal processes. Self-evidently publicly-funded collecting institutions do not simply exist to collect things, but to do so for some merit good purpose defined by policy or, in the absence of policy guidance, through professional practice. The question of acceptable language, therefore, focuses on the *outward looking* words of the Mission Statement Survey and the Documentary Review tagged in the categories 'presentation' and 'use/effect': the Boundary Exchange. Using the top 50 words in these two categories across both datasets, the analysis created three word lists, one each for museums, libraries and archives, aggregated so that words appeared once only. (See Appendices 13.1 – 13.4). These three word lists were then equalised by calculating the frequency of each word as a percentage of the total for an institution type. From these equalised lists all words with frequencies of 1% or more (in each case around 31 words) were extracted into a single list and sorted alphabetically. From this list it was possible to extract words appearing three times (i.e. in each institutional list), twice or singly. The word lists are shown in Table 13.3:

TRIPLES	DOUBLES	SINGLES		
access	accessible	available	future generations	reading
community	activities	benefit	help	relating
encourage	appropriate	children	individuals	seeks
enjoyment	creative	deliver	inspiration	skills
learning	develop	effective	interest	society
people	education	enable	literacy	study
promote	lives	engage	make	support
provide	local	ensure	needs	trust
public	research	evidence	offer	understanding
service	use	exhibit	online	users
		free	opportunities	value
		future	present	visitors
				widely

Table 13.3 *Word appearances within Boundary Exchange tagged words*

The final step in the analysis process was to disaggregate these words into three categories that reflect the intentions stated by Bart of purpose and accomplishment - practitioner actions to

promote connections to assets for defined audiences to achieve certain ends. Table 13.4 shows the words tagged accordingly:

ACTION TO CONNECT		WITH WHOM	FOR WHAT PURPOSE
TRIPLES			
access promote provide	service encourage	community people public	enjoyment learning
DOUBLES			
accessible activities appropriate		lives local	creative develop education research use
SINGLES			
available deliver effective enable engage exhibit free help interest make	offer online opportunities present support trust evidence ensure seeks	children future future generations individual needs society users visitors widely	benefit inspiration literacy reading relating skills study understanding value

Table 13.4 *Boundary exchange words tagged*

Table 13.4 shows that all three sets of data share important words relevant to producing a Shared Mission Statement; a point of departure for exploring collective approaches to advocacy and developing more integrated digital services. Table 13.5 suggests how the words might be used:

> The purpose of museums, libraries and archives is to maintain and **promote** collections and **services** to **encourage people's learning** and **enjoyment** and to develop **communities**.

Table 13.5 *Shared Mission Statement based on word analysis*

This statement includes seven of the ten triple words (emboldened). Those words are close synonyms with the three words not included: *promote* implying *providing access*, and *people* implying *public*. While the triple-cited words rightly form the basis for the Shared Mission Statement, it is important to examine the double and single words to identify whether there are any significant concepts not included. All of the Action to Connect words may be encompassed by *promote*, just as the With Whom words may be aligned with *people* and *community*. Within the For What Purpose category *education* and *research* have affinity with the broader concept of *learning*, whereas *creative* cannot readily be fitted into the statement as it stands. None of the singly-cited words introduce new concepts that cannot be encompassed by the words in the statement.

The process demonstrates that it is possible to construct a Shared Mission Statement using words with frequent citations in the datasets and that the Statement fits broadly with Bart's definition. It offers a 'single voice' for advocacy and a mechanism to draw different institutional forms closer together. The Statement will form an important point of departure for subsequent development activities described in Chapter Sixteen.

13.3 INSTITUTIONAL PARADIGM: STRATEGIC RESPONSE TO CHANGE (Chapters Eight – Ten)

13.3.1 **THE PUBLIC SECTOR CONTEXT**

Chapter Six investigated the wider public sector (structure, policy and power) to identify common characteristics that might form the basics of a generic Institutional Paradigm. Headline characteristics (extracted from Table 6.6) were:

- **Infrastructure** based on silos, with focus on vertical control rather than horizontal collaboration, tending towards fragmentation, but stability through control and slow change.
- **Policy** sometimes tacit, evolved by long-term custom and practice, sometimes explicit direction from the centre.
- **Power** frequently focused on practitioners able to influence direction within local structures, but unable to exert influence nationally.

The analysis demonstrated that, through long evolution, collecting institutions have become firmly embedded within public policy (however tacitly), cultural values and the wider social fabric, producing an effective and stable service model. Yet, at least until the end of the last century, there was only minimal national strategic direction. In consequence, practitioner norms and values of service around learning, research, self-cultivation and social development emerged for each of the institutional forms, but with little incentive for strategic collaboration across different organisation types.

Today, the dual effects of the Network Society with its many socio-technical challenges described in Chapter Four and, since 2008, the drama of the reducing public sector spending due to the global financial crisis challenge the status quo Institutional Paradigm. Budget reductions are not a new challenge for public sector organisations, but the scale of savings required in recent years has reduced both direct funding and also the levels of grant aid available for innovation. Services have been reduced in range and accessibility, new management arrangements introduced and, in some cases, closed completely. Both CILIP and the Museums Association now regularly investigate budget cuts and closures; a task that, in the last century, would have been the exception rather than routine. Additionally, with increasing service contestability (new suppliers entering the previously monopolistic market of collecting institutions: see Chapter 11.6) and competition (for users' attention and occasionally between institutions) the distinctive nature of public institutions threatens to become increasingly diluted and blurred.

In this changing landscape, reducing resources, fragmented structure and often tenuous links to national policy become serious liabilities to progress. To influence future policy and future funding strong voices with compelling messages will be needed at local and national levels; messages that make clear long term social value and how the emerging opportunities of the Internet might deliver maximum value from collection institutions of all types. The Post Office case study in Chapter 6.2.2 demonstrates this clearly. The final four chapters of Part Two (Eight, Nine, Ten, Eleven) examined the scope of strategic thinking and planning for the future since 2000, and the extent to which that thinking and planning embrace the challenges and opportunities of the Network Society. The following two sections synthesise evidence of strategic thinking and planning for the future, and innovation looking first at strategic and policy documents (Chapters Eight, Nine and Ten) and second at relevant literature (Chapter Eleven).

13.3.2 EMERGENT PATTERNS FROM STRATEGIC STUDIES

Chapters Eight, Nine and Ten reviewed 22 strategic documents, including a number of associated reports, focusing particularly on the following four themes relevant to the research objectives:

- Response to the socio-technical impact of digital technologies and the Internet, now and in the future.
- Centrality of the consumer in the future design and delivery of services.
- The value of links between different collecting sectors.
- The importance of shared national strategic direction.

Each of the 22 documents was also assessed against the Three Horizons Model categories described in Chapter 7.2:

- H1: **Sustaining innovation** that maintains the existing orthodoxy: the status quo.
- H2: **Disruptive/transitional innovation** likely to create risks and opportunities that challenge the status quo.
- H3: **Transformative forms** arising from the interaction of H1 and H2: the new status quo.

The drafting of Chapters Eight, Nine and Ten began with the creation of extensive extracts and commentaries (see Appendices to those chapters) from which analyses of the documents were presented in the three chapters. A simple scorecard methodology was used both to categorise document types and to assess them against the four themes and three categories listed above. This chapter synthesises the individual scorecard evidence to derive conclusions on overall approaches, impact and the possibilities for collective action. The following three Tables present summaries of the data from the scorecards from which these comparisons will be derived:

LIBRARIES

	Date	Lead	Study type	Institutional scope	Home Nat. scope	Innovation type	Socio/tech impact (a)	Consumer focus (b)	Links to diff sectors (c)	National strategy (d)
Framework for the future	2003	Govt Dept	SSDP	PUB	ENG	H1	2	1	0	3
Delivering Tomorrow's Libraries	2006	Govt Dept	SS	PUB	NI	H1	2	1	0	3
Modernisation Review of Libs	2009	Govt Dept	SSDP	PUB	ENG	H1	2	2	0	3
Academic Libraries of the Future	2010	Sector	FS	AC	UK	H2/H3	3	3	2	2
Libraries Connecting People	2010	Ind Agency	ADV	ALL	SCO	H1	2	1	1	3
Culture, Knowledge and Understanding	2011	Govt Agency	SF	PUB	ENG	H1	1	1	2	2
Libraries Inspire	2012	Govt Dept	SSDP	ALL	WAL	H1	2	2	2	3
New Chapter for Public Libraries	2012	Charity	SS	PUB	UK	H1	2	2	0	3
Envisioning the Library of the Future	2012	Govt Agency	FS	PUB	ENG	H1/H2	3	2	0	3

KEY TO TABLE

STUDY TYPE	INNOVATION TYPE
ADV = Advocacy document FS = Futures study SF = Strategic framework SS = Strategic study SSDP = Strategic study + development plan	H1 = **Sustaining** that maintains the existing orthodoxy; the status quo H2 = **Disruptive/transitional** likely to create risks and opportunities that challenge the status quo H3 = **Transformative forms** arising from the interaction of H1 and H2; the new status quo

ASSESSMENT OF KEY FEATURES	
a. Response to socio-technical impact of digital technologies and the Internet, now and in the future b. Centrality of the consumer in the future design and delivery of services c. The value of links between different collecting sectors d. The importance of shared national strategic direction	OPTIONS **0** = no mention **1** = passing mention **2** = priority **3** = main focus in document

Table 13.6 *Summary of analysis of libraries strategic documents*

MUSEUMS

	Date	Lead	Study type	Institutional scope	Home Nat. scope	Innovation type	Socio/tech impact (a)	Consumer focus (b)	Links to diff sectors (c)	National strategy (d)
Renaissance in the Regions	2001	Govt Agency	SSDP	MUS	ENG	H1	2	1	0	3
Manifesto for Museums	2004	Sector	ADV	MUS	ENG	H1	1	1	0	3
Understanding the Future	2005	Govt Dept	SSDP	MUS	ENG	H1	1	1	1	3
Leading Museums	2009	Govt Agency	SF	MUS	ENG	H1	2	2	0	3
Museums Strategy for Wales	2010	Govt Dept	SSDP	MUS	WAL	H1	3	2	2	3
Northern Ireland Museums Policy	2011	Govt Dept	SSDP	MUS	NI	H1	2	2	0	3
Culture, Knowledge and Understanding	2011	Govt Agency	SF	MUS	ENG	H1	1	1	2	3
Going Further	2012	Govt Dept	SSDP	MUS	SCO	H1	2	2	0	3
Museums 2020	2013	Sector	FS	MUS	UK	H1	1	2	0	2
Museums in the Digital Age	2013	Company	FS	MUS	UK	H2/H3	3	3	0	1

KEY TO TABLE

STUDY TYPE	INNOVATION TYPE
ADV = Advocacy document FS = Futures study SF = Strategic framework SS = Strategic study SSDP = Strategic study + development plan	H1 = **Sustaining** that maintains the existing orthodoxy; the status quo H2 = **Disruptive/transitional** likely to create risks and opportunities that challenge the status quo H3 = **Transformative forms** arising from the interaction of H1 and H2; the new status quo
ASSESSMENT OF KEY FEATURES	
a. Response to socio-technical impact of digital technologies and the Internet, now and in the future b. Centrality of the consumer in the future design and delivery of services c. The value of links between different collecting sectors d. The importance of shared national strategic direction	OPTIONS **0** = no mention **1** = passing mention **2** = priority **3** = main focus in document

Table 13.7 *Summary of analysis of museums strategic documents*

ARCHIVES

	Date	Lead	Study type	Institutional scope	Home Nat. scope	Innovation type	Socio/tech impact (a)	Consumer focus (b)	Links to diff sectors (c)	National strategy (d)
Archives Task Force	2004	Govt Agency	SSDP	ARCH	UK	H1	3	2	0	3
Archives Policy for Northern Ireland	2004	Govt Dept	SSDP	ARCH	NI	H1	2	1	1	3
Archives for the 21st Century	2009	Govt Dept	SSDP	ARCH	E&W	H1	3	2	0	3

KEY TO TABLE

STUDY TYPE

ADV = Advocacy document
FS = Futures study
SF = Strategic framework
SS = Strategic study
SSDP = Strategic study + development plan

INNOVATION TYPE

H1 = **Sustaining** that maintains the existing orthodoxy; the status quo
H2 = **Disruptive/transitional** likely to create risks and opportunities that challenge the status quo
H3 = **Transformative forms** arising from the interaction of H1 and H2; the new status quo

ASSESSMENT OF KEY FEATURES

a. Response to socio-technical impact of digital technologies and the Internet, now and in the future
b. Centrality of the consumer in the future design and delivery of services
c. The value of links between different collecting sectors
d. The importance of shared national strategic direction

OPTIONS
0 = no mention
1 = passing mention
2 = priority
3 = main focus in document

Table 13.8 *Summary of analysis of archives strategic documents*

In assessing the evidence of the Tables 13.6 - 13.8 both similarities and differences are apparent. Of the 22 documents analysed, 50% were strategic studies with associated development plans, with five strategic studies/frameworks without any clear progression indicated, four futures studies and two strategic advocacy statements. Just over 70% of the documents were from government departments or their agencies, three from sector bodies and

one each from a charity, a commercial organisation and a membership organisation. The documents for museums and archives addressed all forms of institutional types while the libraries documents split six on public libraries, two on all library types and one on academic libraries. Geographically, ten studies focused only on England, five were UK wide and three each for Northern Ireland and Wales[148], and two for Scotland. The only complete absence was any strategic documents covering archives in Scotland.

Of the four futures studies two were managed within sectors – **Academic Libraries of the Future** and **Museums 2020**, while **Envisioning the Library of the Future** was led by the Arts Council (a government agency) and **Museums in the Digital Age** was undertaken by a foresight team in a public company. Both **Museums 2020** and **Envisioning the Library of the Future**, although using futuring techniques, were intended to connect to previous programmes of work to develop medium term action plans for development. The other two presented more longer-term and radical cases for possible futures. These priorities reflect one of the most obvious outcomes of the analysis process, that the status quo model of sustaining innovation is the dominant form within strategic planning. Only **Museums in the Digital Age** and **Academic Libraries of the Future** examined how socio/technical trends may bring serious disruption with the possibility of service transformation in the long term. The fact that neither of those reports appears to have had significant impact subsequently is yet another indicator of the dominance of the status quo: the Institutional Paradigm.

Since 2000 responsibility for public libraries, museums and archives' policy has been (largely) devolved to the four Home Nation governments. However, within the four key features highlighted in the summary tables, there is a reasonable degree of convergence. Analysis of the three scorecards shows the highest priority is the need for national strategy to guide policy; followed by socio/technical impacts (although somewhat lower for museums than for libraries and archives); consumer focus next with the importance of links to other collecting sectors lagging far behind. The weightings allocated follow from close reading of the documents; their interpretation is used to highlight trends to compare with other aspects of data analysis. The aggregation of all the evidence so far suggests that while there has been a significant blossoming of work to develop strategies for collecting institutions, that work remains very much rooted in a long-term future for the Institutional Paradigm.

13.3.3 STRATEGY AND CHANGE

There is a further aspect of synthesis that must be applied to the review of strategic documents. What has been presented so far is the outcome of analysing individual documents and, particularly with government-led studies, the most significant measure of utility must be to do with *consequences* (what are the effects of the studies) rather than individual document *narratives* (the words on the page), however widely consulted upon. The next three Tables (13.9 – 13.11) present each of the documents together with a brief summary of outcomes and

[148] Strategic responsibilities for archives in England and Wales lie with The National Archives, so that the Welsh strategy forms a subset of the TNA strategic plan.

subsequent actions that were described in Chapters Eight, Nine and Ten. In this representation there are differences within and between strategic studies in the four Home Nations and across the three institutional forms.

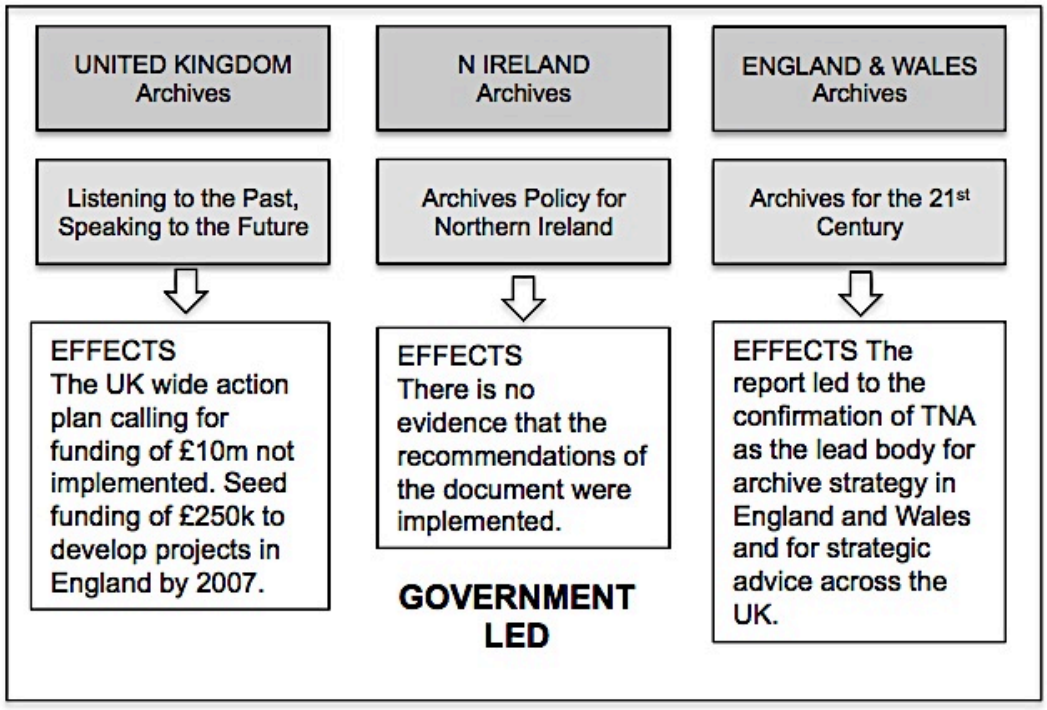

Table 13.9 *Archives strategic studies with comments on effects*

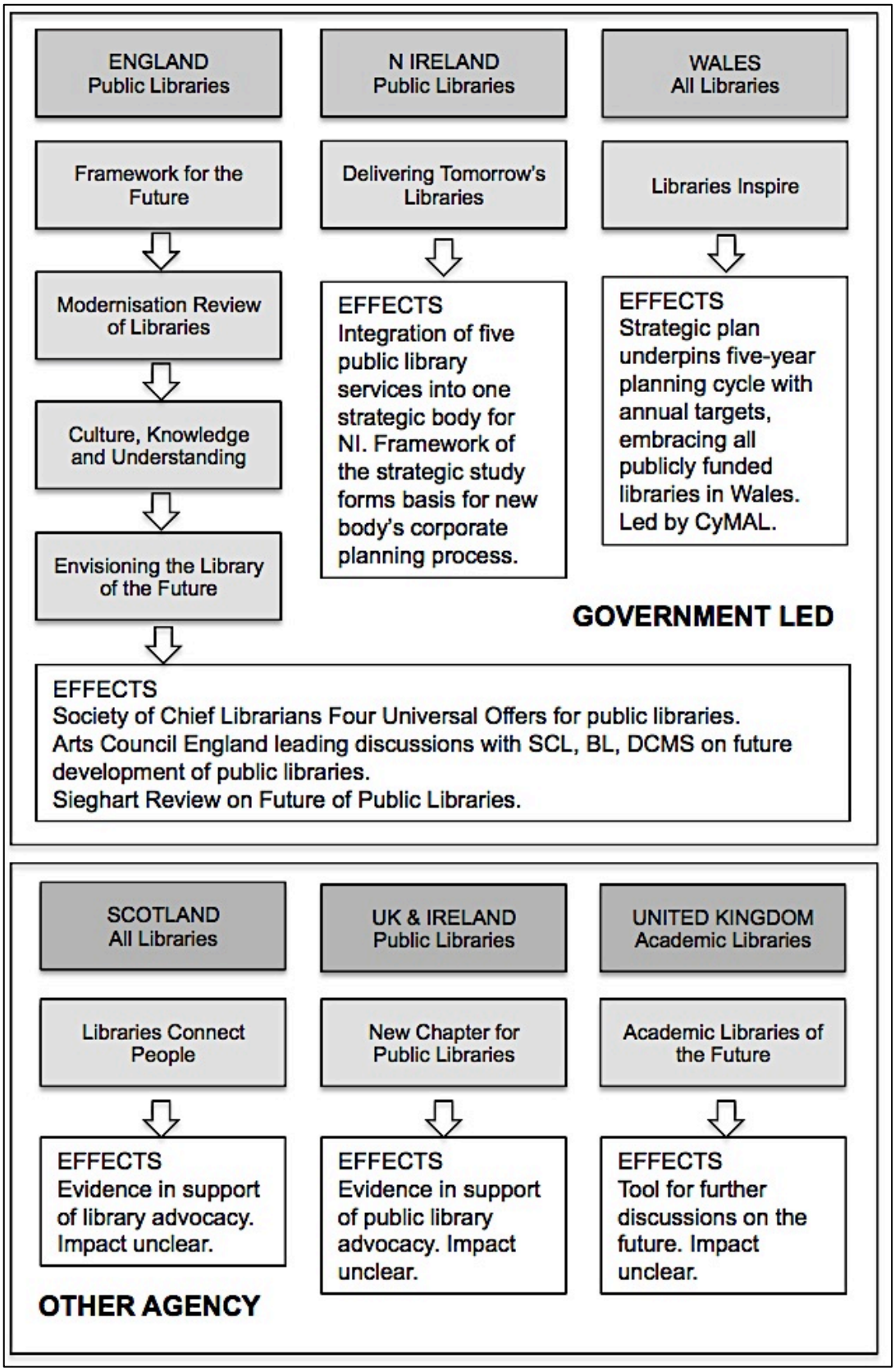

Table 13.10 *Libraries strategic studies with comments on effects*

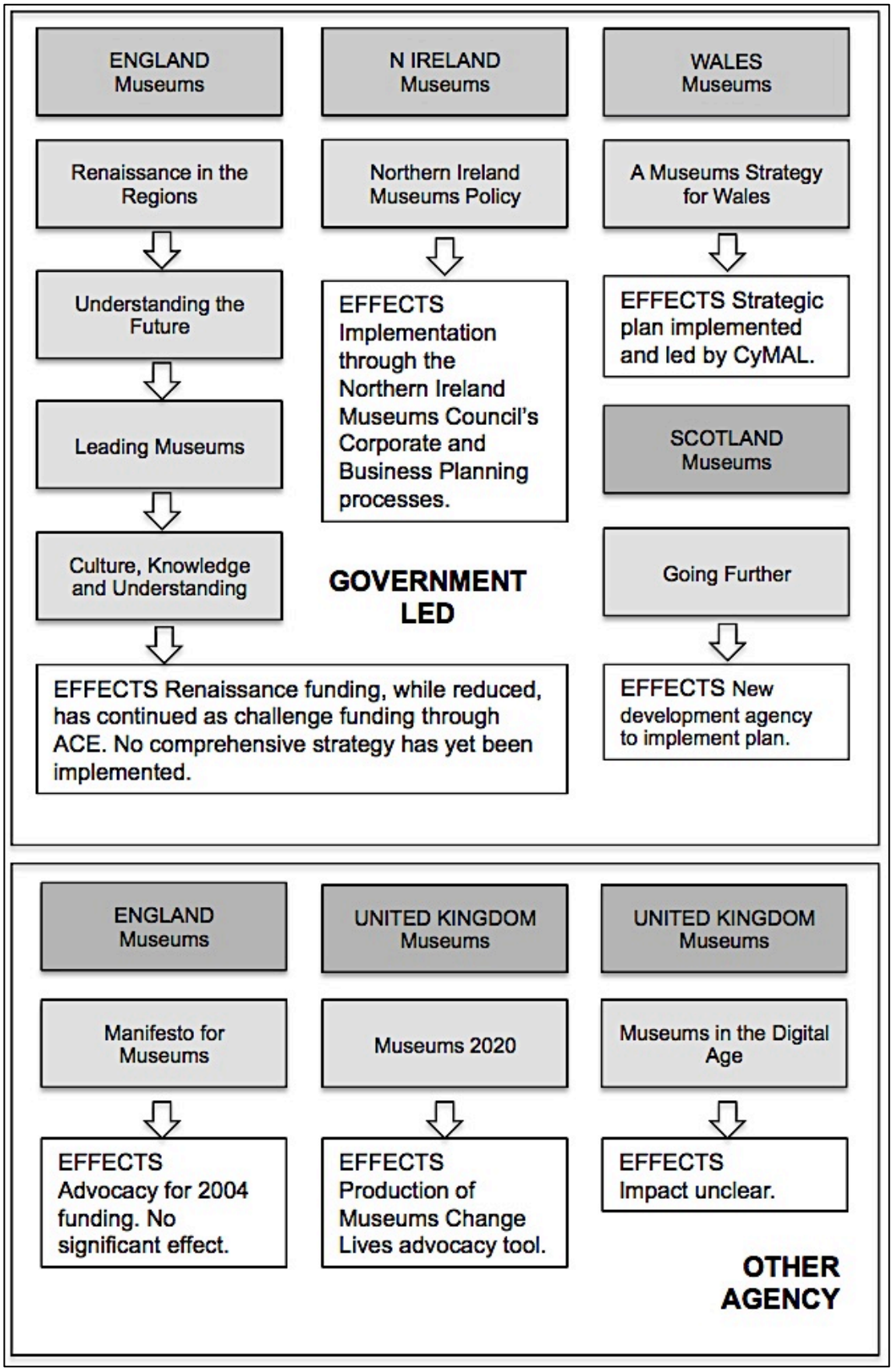

Table 13.11 *Museums strategic studies with comments on effects*

Looking at each of the institutional types in turn, archives evidence in Table 13.9 is far briefer than museums and libraries. Following on from the work of the Archives Task Force (ATF) in 2003/04, with its comprehensive strategic plan, the MLA established the Archives Development Programme with grant aid of £250,000 by 2007, but the other Home Nations showed limited appetite for significant investment or change. The Northern Ireland policy document echoed many of the priorities of the ATF report, but no discernable action was taken to formalise planning and action within a lead body. Even fewer facts can be traced on the strategic development of archives in Scotland. As the biggest archives organisation by a long way, The National Archives has always had some impact on policy across the UK, not least because of its lead responsibilities to curate the public record. While devolution at the end of the last century gave the chance for more independent action for Scotland and Northern Ireland, the creation and implementation of nation-specific plans seems not to have been a priority. For Wales, which is linked with England for public record responsibilities, the recent role for TNA to lead strategy is reflected in the latest strategic TNA documents being reproduced in Welsh and English to form the basis for Welsh archives strategy.

For public libraries, both Northern Ireland and Wales have strategic plans in place while there is no government-supported strategic study in Scotland and after a number of studies and reports in England across the past 12 years, strategic planning remains an informal process of negotiation across a number of different organisations. It is worth noting also the structural differences in place across England, Wales and Northern Ireland. In Northern Ireland the library strategy is implemented by the single public library agency for Northern Ireland. In Wales there is a well-established programme of strategic planning and implementation managed from the centre involving 22 independent local authorities. In England there have been a number of public library studies covering 151 local authorities, with limited negotiation to implement national programmes.

In comparison with the public library community, academic libraries have not had the same level of national debate and research to produce a national strategy. The **Academic Libraries of the Future** study presented varied scenarios of the future, but seems not to have led to radical new thinking or action. The same is true of the other two non-government documents – **A New Chapter** (CUKT) and **Libraries Connecting People** (SLIC) – that may offer some utility to support argument, but are not, of themselves, strategic development plans.

For the government-led strategic museums studies, England is unlike the other three countries each of which has a strategic plan in place being led by a single agency - CyMAL, National Museums Northern Ireland and Scotland's National Development Body. In part, strategic planning for England's museums resonates with public libraries – a series of strategic plans that has led to the framing of shared activity through information, discussion and negotiation, involving Arts Council England, local authority museums, national museums and independent bodies. The difference from strategic planning for libraries since 2000 is the large, long-term investment made into the infrastructure of England's museums following the Renaissance in the

Regions report of 2000. Although reduced, this funding still supports strategic projects in England's museums.

In the previous section (13.3.2) the point was made that, across the four Home Nations, the government-led strategic studies contain similarities of priority and purpose. Not surprising given that for most of the history of museums, libraries and archives, devolution of policy did not exist. They share the same *root stock* and much of the same fertilisation and pruning. What is apparent when the effects of the strategies are considered across the four Home Nations is that the five government-led reports on museums and libraries in Northern Ireland, Scotland and Wales have all led directly to implementation of national strategies, each with a strategic body mandated to lead. In England there have been a number of reports on museums and libraries since 2000, the **Modernisation Review of Libraries** and the various reports associated with **Leading Museums: a Vision and Action Plan for England's Museums** being the closest to frameworks for national strategies. Yet strategic development remains a process of negotiation between a number of strategic and practitioner bodies. In the three smaller nations, the 'distance' between government and service provision is, naturally, much shorter than in England. The most extreme comparison is between public libraries in Northern Ireland where the Department of Culture, Arts and Leisure delegates responsibility for the national strategy to LibrariesNI, the single delivery agency for public libraries, whereas in England strategic responsibility for public libraries, without a national strategy, sits with Arts Council England, while delivery of service is through 151 quasi-independent local authorities. Alongside issues of scale, in English governance and administration, structures are more complex and UK-wide policy responsibilities are blended in with policies for England alone. "Closer to political awareness" was how Kendall (2013) described the situation in the other Home Nations in her article on strategic planning for museums in the **Museums Journal** and respondents all indicated that a national strategy would be much harder to implement in England.

Being hard to achieve is not, of itself, an argument for ignoring the lack of national strategies for museums and libraries in England, not least since the studies in Chapters Eight and Nine all draw attention to the importance of strategic collaboration, especially in the digital space. None of the developments in the other Home Nations has yet provided incontrovertible proof that national strategies make a significant difference, but they may well do so. Central co-ordination seems likely to be a vital factor in the success of digital innovation and established national strategies may offer important stepping-stones to success. Additionally, the strong co-ordination that is possible in Wales through CyMAL based within a department of Welsh government and strategically responsible for museums, libraries and archives[149] has already demonstrated how digital services may be integrated through People's Collection Wales (see Chapter 11.6.2, exemplar 5) led by the National Library of Wales, but involving museums, libraries and archives of all types, as well as communities and individuals.

[149] With The National Archives

13.3.4 OUTCOMES FROM THE SYNTHESIS OF STRATEGIC STUDIES

There are a number of trends and patterns to be drawn from the synthesis of the strategic documents:

- Since 2000 there has been a significant increase in the development of national strategic planning studies for collecting institutions, suggesting an increasing awareness of the need to position services within broader public policy frameworks.
- This increase has not been evenly spread either across institutional forms, or Home Nation boundaries.
- Broadly the purposes and priorities in strategy documents relating to the three institutional forms share similar priorities due to the common histories and shared practitioner norms established before the processes of devolution.
- A government-supported strategic plan with a lead body provides the potential for greater effect through command and control within existing structures. However, increased scale may limit the ability both to command and control.
- Strategic studies supported by additional funding, the case in Wales (museums and libraries), Scotland (museums) and museums in England through Renaissance in the Regions funding, are more likely to achieve *buy in* across different layers of governance.
- By contrast studies conducted outside of the government structure have generally had less impact on policy direction; for example, the two museums futures studies – **Museums 2020** and **Museums in the Digital Age** – have yet to impact on national policy.
- A most important factor implicit in the evidence, but risking invisibility, relates to the difference between strategic plans for museums and archives that cover all types of organisations, while in England there has yet to be a strategic study that considers HE and FE, school and public libraries together with the national library.
- Finally, the most generic conclusion of all to draw from the evidence is that there is almost no evidence to show that the sector is thinking seriously about radical change in the future and no evidence whatsoever that any such change is being implemented. The Institutional Paradigm remains the status quo.

13.4 SERVICE INNOVATION AND THE FUTURE OF COLLECTING INSTITUTIONS (Chapter Eleven)

This final part of the synthesis process draws together the common themes (and differences) found in the literature associated with innovative uses of the Internet, and the implications for collecting institutions of the wider effects of such developments in society at large. Chapter Eleven sought three perspectives on this, with particular emphasis on the boundary exchange between user and collection:

- Research focused on radical consideration of the future purposes of museums, libraries and archives, especially within the context of socio/technical change.
- Research on collaboration across different institutions.
- Identifying examples of disruptive/transformational innovation both within the collecting institution sectors and more widely across the Web.

Perhaps the most obvious difference between the literature of libraries and that of museums and archives is a contrasting point of departure on how the impact of technological innovation is viewed. The literature of museums and archives reflects a strong focus on how innovation may challenge principles, practice and purpose, while for libraries digital innovation is a tool for service management and delivery without great attention to broader purpose. This is best demonstrated by a comparison of the comments of Goulding (2006) that the purpose of the contemporary public library service is still being negotiated and Dempsey (2007) pointing out that librarians are, "…more comfortable with asserting than demonstrating value", and the perspectives of archivists debating the implications of technology for the traditional roles of custody and appraisal versus the new opportunities for greater disclosure and social engagement (Bell, 2014; Brown, 2014; Flinn, 2007). For museums the Museums Association's Round Table debate demonstrated similar tensions (Museums Association, 2011). The contrast between libraries' perspective and museums and archives resonates strongly with the theme that has emerged in textual analysis and in strategic documents, that for libraries using the Internet is an accepted part of operational practice, but with little reflection on what might be the long term potential.

At the same time, despite, or perhaps because of this pragmatic approach to the adoption of digital techniques, in the late '90s public libraries were able to make a convincing national case through the then Library and Information Commission for large-scale funding to create ICT learning centres in all UK public libraries. Goulding's (2006) assessment of the People's Network project highlighted the important transformational impact that the project had on the status of public libraries and social access to the Internet at a time when broadband was a rare commodity. By contrast for museums and for archives the impact has been much less broad in scope. Despite the Renaissance in the Regions report highlighting the sector's aspiration for the "…museum to be a centre for digital learning", (Resource, 2001, p61) the funding that became available soon after the People's Network had been completed did not give digital innovation the same priority as had been the case for public libraries. That is not to say that technology was not deployed within museums or archives (see the exemplars in Chapter 11.6.2). Rather, that the applications reported in the literature included a range both of practical projects and reflective ideas, but nothing at the scale or cost of what public libraries achieved with the People's Network.

Attention must be drawn to the role of Jisc in support of both strategic innovation and support for the digitisation of collections. Over the past ten years significant investment has been made in creating digital resources, but it is only recently that focus has turned to the collective

implications of a *unified* body of digital collections rather than creating digital versions of specific collections (see Chapter 11.6.2).

Turning to similarities across collecting institutions there were two topics within the literature review that examine new possibilities for service models. These were papers on the interlinked issues of focus on the user and repackaging and redefinition of services in the digital space – the boundary exchange. For example:

MUSEUMS	
Parry (2013) Museums Assoc. (2011)	On the need for a new digital paradigm in the Museums Association Round Table report and on the future needs for professional skills and the possible "digital heritage diaspora" in the introduction to Museums in a Digital Age.
Lynch (2011)	Proposing that for most people, most of the time the digital is as good as the physical.
Knell (2003)	On the boring museum visit.
Leicester Uni. (2013) Souhami (2014) Merrit (2014)	The three future of museums conferences.
LIBRARIES	
Baker and Evans (2011)	On the possibilities for completely new user-focused service platforms to connect more people more effectively to collections.
Moss (2008)	Facing up to the realities of the second digital revolution.
Jisc (2012)	On the future needs of researchers.
Dempsey et al. (2014)	The reality that users operate at the network level, libraries at institution level; the radical shifts in academic library collections – from outside-in to inside-out.
ARCHIVES	
Bell (2014)	On the challenges of participation and the need for new approaches to archival practice.
Gray (2008)	On redefining the relationship between traditional archival skills and the growing ability for individuals and communities to participate successfully.
Convery (2011)	On the potential of public participation.

Table 13.12 *Examples of papers that propose progress through disruptive innovation*

These topics do not in all cases specifically focus on the digital, but they are concepts identified across all institutions that suggest challenge to the status quo approach. These papers and others in similar vein are but a drop in the ocean compared with the very extensive literature on collecting institutions across the last 14 years. However, it is important to note that there is such thinking within the three sectors, since they provide statements of alternative possibilities on which to develop and promote innovation based on reflective thinking.

Similar themes also appear in the review of the literature on cross-institutional collaboration where there have been a small number of projects and programmes since the early 2000s exploring ways in which digital collections might be joined together for user benefit – joining "islands of knowledge" together (Geser and Pereira, 2004). There have been theoretical frameworks, surveys of case studies and several practical programmes ranging from a major development in Germany (Kirchhoff, Schweibenz and Sieglerschmidt, 2009) and European

projects (Brophy and Butters, 2007), plus a project to test cross-institution collaboration in organisations having museum, library and archival collections in the US and Europe (Zorich, Waibel, and Erway, 2008). This latter project presented both successful programmes of work together with demonstration that the value of institutional collaboration is far from universally recognised. Some invited participants made clear they did not consider such convergence as a priority – echoing the results of the analysis of strategic documents in section 13.3.2 where, in Tables 13.6 – 13.8 the concept of working across sectors received hardly any mention.

13.4.1 THEMES ARISING FROM SYNTHESIS OF THE LITERATURE REVIEW

- Literature on radical innovation in collecting institutions represents a very small element of the overall research literature since 2000. The limited material that might be classified *as disruptive* explores potentially radical ways in which the Internet might change service paradigms and the importance of the user in service innovation. The boundary exchange will be a vital aspect of development – a priority identified also in the textual analysis work.
- However, much of the material that relates to the Internet focuses on Web 2.0 tools and 'backend' technical developments designed to support current service paradigms.
- Libraries literature is more pragmatically based in operational practices than museums and archives, highlighting the early adoption of technologies by libraries and their assimilation into routine practices.
- Museums and archives have explored the more fundamental issues of purpose and practice in relation to the Internet that has not been the case with libraries.
- The only large-scale transformative project has been the People's Network project that raised awareness of the use and value of broadband across the UK.
- Finally, there is a small body of literature examining the value of much closer integration of collections in the digital space, but while both theoretical work and practical projects have been undertaken, across collecting institutions generally, such convergence is seen as a very low priority, as demonstrated in section 13.3.

13.5 SUMMARY OF SYNTHESIS OUTCOMES

The opening section of this Chapter set out three key conclusions to be synthesised from Part Two evidence: the creation of a Shared Mission Statement, the nature and ongoing utility of the Institutional Paradigm and the readiness of practitioners to deal with the future (the Bereitschaftspotenzial). This section summarises the outcomes of the synthesis.

13.5.1 THE SHARED MISSION STATEMENT

> "The purpose of museums, libraries and archives is to maintain and promote collections and services to encourage people's learning and enjoyment and to develop communities."

The outcome of the synthesis in section 13.2 was the formulation of a mission statement containing seven of the ten top frequency words cited by all institutions. The statement highlights that despite differences in vocabularies and priorities, there is a level at which a meaningful common purpose may be defined. Initially, its purpose should be to support debate around shared approaches to development in the digital space and to the value of collective advocacy. Despite the relatively low numbers of institutions publishing meaningful mission statements (Chapter 5.3.1), the analysis and synthesis were based solely on evidence sourced directly from collecting institutions themselves and strategic documents about them. Thus, however generic, value should be derived from progress towards shared action rather than extensive negotiation of the statement's vocabulary or overall purpose. The Shared Mission Statement is an important point of departure in the recommendations for further action in Chapter Sixteen.

13.5.2 THE CURRENCY OF THE INSTITUTIONAL PARADIGM

The review of strategic documents demonstrated that since 2000 there had been a very significant increase in studies and strategic documents on policy and co-ordination of collecting institutions across the United Kingdom. However, the conclusion of the review was:

- There were variations in the extent to which strategic proposals turned into formal plans of action across the four Home Nations.
- Differences in strategic priorities proposed for museums, libraries and archives and disparities in the take up of the Internet.
- Lack of collective strategy across different types of libraries in three of the four Home Nations.
- Where the Internet is examined it is to sustain and enhance the Institutional Paradigm. The "industry friendly innovation" described in Chapter Four (Naughton, 2012, p64).
- The search for words relating to innovation, digital technologies and the Internet identified only a very small number of occurrences (0.5% of the 26,000 words searched) of which almost three quarters related to libraries.
- Only two of the 22 documents (Curtis, 2010; Arup Foresight, 2013) demonstrate any reflection on the extent to which socio-technical change might bring radical revision to service paradigms in the future.

The same issues are also true of the conclusions of Chapter Eleven, that while the Internet as a service tool had become embedded within the work of all collecting institutions, there was very little evidence of disruptive or transformative innovation either in the literature on research and innovation reviewed or the exemplars described in Chapter 11.6, especially in the comparison made with the outer world examplars. Vertically integrated structures sustain emphasis on the needs of institutions to *protect* ownership and brand identity so that for many the collective integration of digital artifacts is constrained. Such continued fragmentation across collecting institutions means that a decade on from the Digicult report digital services continue to be "many islands, with very different islanders…" (Geser and Pereira, 2004, p8). This is a concern

reflected most recently in Jisc's study to widen access to the many digitisation projects it has funded[150].

All of this evidence suggests that, while across the last fourteen years there have been significant socio-technical changes alongside the increased emphasis on developing policy and strategy for collecting institutions, the characteristics of the Institutional Paradigm explored in Chapter 6.3.2 remain unchanged:

INFRASTRUCTURE
1. TOP/DOWN SILOS: Within the vertically integrated structures of public service. 2. CONTROL, NOT COLLECTIVE ACTION: While a stable and controlling form of organisation, vertical integration constrains horizontal collaboration. 3. DESTINATIONS: primarily physical collections and services in places to visit. 4. FRAGMENTATION: caused by organisational structures and forms of audiences and collections. 5. STABILITY: Neither incremental change nor structural fragmentation seriously hindered service delivery so long as social change was slow, funding levels were maintained and service monopolies uncontested.
POLICY
6. SOCIAL PURPOSE AND PRACTITIONER VALUES: defined by a long process of incremental evolution. 7. EXPLICIT POLICY: until the end of the 20th century limited to minimal direction for statutory services and some basic standards assessment tools. 8. TACIT POLICY: For almost all of collecting institution history incremental evolution sustained a stable, monopolistic service paradigm that provided unchallenged and highly regarded merit good services.
POWER
9. LOCALLY: in the absence of clear national policy direction practitioners may be able to influence priorities and methods within local governance structures. 10. NATIONALLY: The tradition of local service (defined by geography or audience), the hierarchy of vertical integration and the fragmented nature of the three sectors have acted to constrain the ability to exercise collective power at national level to influence and shape policy.

Table 13.13 *Key features of the Institutional Paradigm, from Chapter 6.3.2*

From the synthesis of this chapter it is possible to reformulate the Organisational Ecosystem schematic of Chapter Six to show how the effects of digital technologies in recent years have not changed significantly the organisational practices and structures within which collecting institutions operate:

[150] Make Your Digital Resources Easier to Discover website. Available at: http://www.jisc.ac.uk/guides/make-your-digital-resources-easier-to-discover [accessed 15th April 2014]

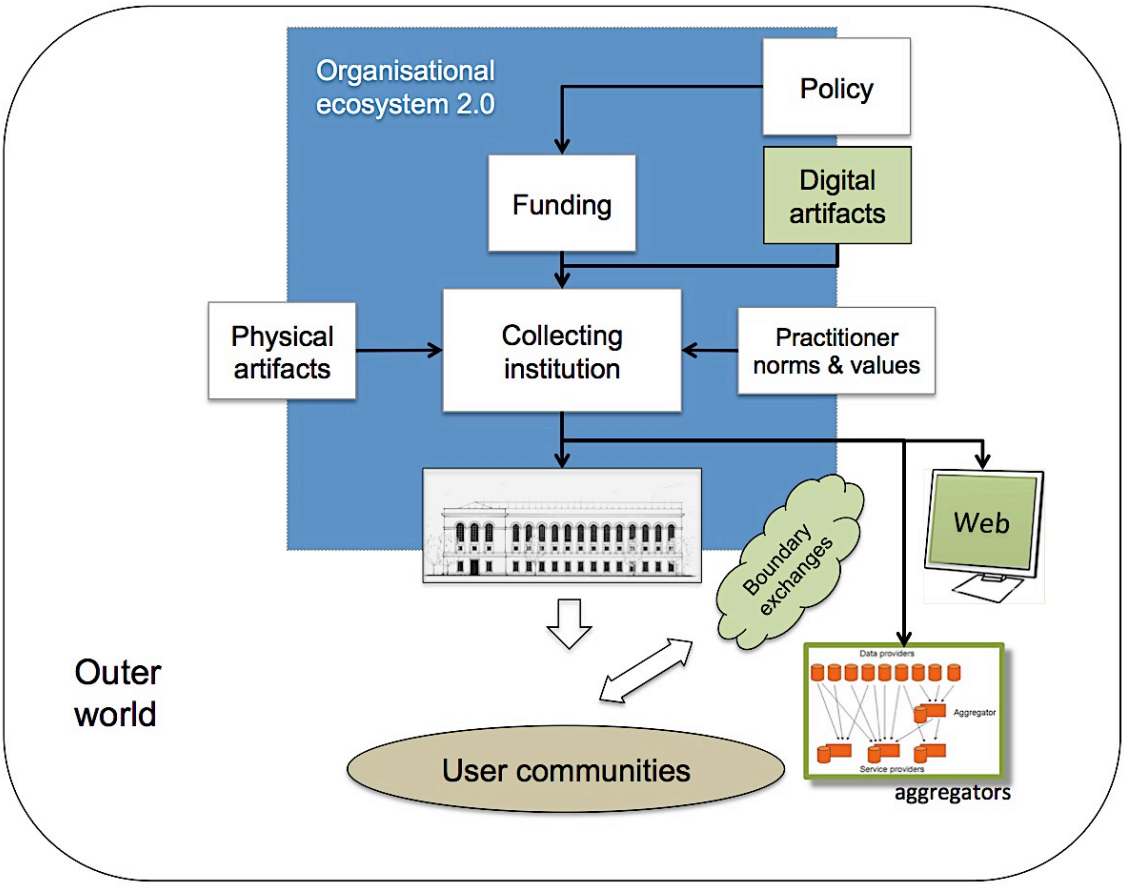

Table 13.14 *Organisational Ecosystem 2.0 schematic*

The schematic shows that service delivery changes have focused on the adoption of digital artifacts (commercial knowledge services, born digital items, institutional digitised collections), and the delivery of collection information, images and documents using the organisation's website or through aggregator services. This has been done as *add ons* to the institutional processes and structures. This redefined ecosystem schematic will be used in Chapter Fifteen as comparator to a service paradigm that might better reflect the redefined needs of digital innovation and service in the Network Society.

13.5.3 THE READINESS OF PRACTITIONERS TO DEAL WITH CHANGE

The last of the three tasks in this Chapter is consideration of the extent to which, despite the wider traditions and constraints of the Institutional Paradigm, practitioners in their writing understand and explore the implications of 21st century socio-technical change. Practitioners are central to defining the future and this task sought to establish the extent to which practitioners had examined how collecting institutions might deliver maximum user value through digital technologies now and in the future. Chapter 1.2 introduced the concept of Bereitschaftspotenzial, or *readiness potential* (an observed phenomenon from neuroscience) as a means of assessing the preparedness of collecting institutions to respond positively and quickly to the challenges created by the socio-technical determinism of the Internet. Such capacity might include power to take action, clear strategies and policies, shared long-term mission, funding and practitioner skills and competencies and organisational openness to

empower innovation and experiment. All of which are components in both the Institutional Paradigm and practitioner worldviews.

In the literature of the last 14 years how have the nature of innovation and the long-term implications of the Internet been interpreted? An answer to this question would contribute to the task of Research Objective 7 – "assessment of the freedom and ability of service managers and institutions to position their services to deliver maximum value to users through digital services (the readiness potential)". The constraints of infrastructure, policy and power have shown that the Institutional Paradigm remains the orthodoxy and therefore that innovation is focused on sustaining current organisational structures (H1). The conclusion of the literature review, that sought particularly the extent to which research focused on the boundary exchange between the user and the institution/collection, was that for all but a limited number of documents (see Table 13.12) those practitioners writing about innovation and the Internet continue to see the future through a worldview rooted in the institutional status quo, reflected in Table 6.5:

CHANGE AND INNOVATION
1. RISKS OF STRATEGIC CHANGE: the price of making mistakes include both financial and social penalties engendering a culture of risk aversion in bureaucratic structures.
2. ORGANISATIONAL CONSTRAINTS: Strategic change is constrained since, traditionally, vertical integration restricts inter-organisational planning and implementation.
3. COLLECTING INSTITUTION SPECIFIC NEEDS: maintaining and exploiting physical collections over time places additional constraints on radical change due to traditional user expectations and sunk investment.
4. INCREMENTAL CHANGE: In consequence generally innovation has been incremental, undertaken within existing organisation structures of power and procedure. It has been 'sustaining innovation' to maintain a status quo that does not challenge established services paradigms.
5. THE LIMITS OF INCREMENTAL CHANGE: The increasing speed of change and complexity of social needs means that an incremental approach to strategy and change may become increasingly disconnected from the needs (behaviours and expectations) of the user. While most change and innovation continues to take place within traditional practices and structures, public sector examples of strategic projects and long-term planning activities were identified (see section 6.2.2).

Table 13.15 *Features of innovation in the public sector (Table 6.5)*

13.5.4 THE UTILITY OF THESE OUTCOMES

It is undoubtedly the case that the Internet has changed aspects of service management and delivery across many collecting institutions. Nevertheless, the process of synthesis and summary that has been undertaken in this chapter demonstrates very clearly that the Institutional Paradigm remains the foundation of all aspects of operation and planning. There are variations – such as the joint digital collections of People's Collection Wales – but there is hardly any evidence from strategies, the textual analysis of documents and mission statements or from the literature, that organisational forms are changing significantly in response to socio-technical change. Nor is there a body of literature looking at the long-term risks and opportunities challenging the conventions of the present.

The intention of this chapter has not been to offer a critique of collecting institutions, but as synthesis of phenomena interpreted from a wide range of documentary evidence, almost all of which assumes a continued institutional status quo. Present practices and the Institutional Paradigm may turn out to be the best strategy for engagement with the Network Society. However, the point must be made that there is little evidence of reflection or debate about the strengths and weaknesses of more radical approaches to future presentation and delivery of digital services and their effects.

Nevertheless, the process of synthesis has demonstrated unmistakably common themes across collecting institutions that offer a firm foundation to move on to the next stage of synthesis. In the next chapter the Institutional Paradigm will be set beside the observed characteristics of socio-technical change to judge where they align and where they are different.

CHAPTER FOURTEEN
Collecting Institutions: Challenges and Opportunities

14.1 CHAPTER PURPOSE

Chapter Fourteen focuses on Research Objective 6 (see Chapter 12.1). It will demonstrate the opportunities and challenges for collecting institutions within the context of the emergent Network Society. It will achieve this through comparison between the features of the Institutional Paradigm (Chapter 13.5.2) and the key supply-side trends - the Generic Drivers of Change – from the outer world of Chapter Four.

14.2 METHODOLOGY

Chapter Thirteen made clear that the Institutional Paradigm remains dominant across all collecting institutions. The features of the paradigm were presented in Tables 13.13 and 13.15. To understand how the key trends driven by the Generic Drivers of Change might assist (or inhibit) maximising collecting institutions' services in the digital space there is the need to draw out meaningful differences and similarities between the Institutional Paradigm and the Generic Drivers of Change. Digital networks may offer institutions opportunities to extend and enhance their contribution to Society, yet, at the same time, Chapter Four presented evidence of increasing competition of digital innovation in service areas once the monopolistic domain of public sector institutions. 24/7 information services, new media, high resolution images and powerful online search tools, together with wider choices for the individual's available time all challenge the relationship of the collecting institution with its audiences. Collecting institutions become part of a much larger and heterodox supply chain of information and knowledge-based services and must be clear about how they fit into that more complex landscape.

The comparisons that are made within this chapter will support the creation in Chapters Fifteen and Sixteen of a new service paradigm for digital innovation together with approaches to engaging with both challenges and opportunities.

14.3 OPPORTUNITIES FOR COLLECTING INSTITUTIONS ENABLED BY THE FOUR GENERIC DRIVERS OF CHANGE

The four Tables below identify the key opportunities for collecting institutions derived from the Generic Drivers of Change, based on the evidence of Part Two and the synthesis of Chapter Thirteen.

14.3.1 OPPORTUNITIES FROM THE INTERNET AS DIGITAL COMMON CARRIER

Features of Generic Driver of Change	Opportunities for Collecting Institutions
Single channel: forming a global network	Aggregation of different forms of material into a common knowledge base
Internet protocol: the common transmission standard enables the integration of resources of many different types	Aggregation provides the mechanism to build a comprehensive, integrated repository of resources across all knowledge institutions New forms of interpretation possible, recycling the same resources to meet different needs
Convergence: creates competition, but also comparison services improving consumer choice	Widening user access to collecting institutions' resources, maximising range of choice through a user-focused interface and extensive resource aggregation The means to differentiate collecting institutions' services from external online competition
Instant two-way communication: empowers the user to engage and to interact	Two-way engagement draws users in to share their views and knowledge, encouraging sustained use and learning

Table 14.1 *The Internet as digital common carrier*

The common carrier nature of the Internet offers the opportunity to change fundamentally the relationships that may be formed between different digital artifacts and in the ways they may be presented to and exploited by the user. It is certainly the case that practical examples of aggregation projects to exploit these opportunities may be observed in collecting institutions today, as demonstrated in Chapter 11.6.2 in the work of the Jisc, Europeana and Your Paintings. These, as with other aggregation services, generally operate as *digital islands*, each with its own user interface of varying quality. Similar examples have already been cited of projects designed to aggregate resources within particular institutional disciplines. In Appendix 8.9 reference was made to the development of a "unified digital platform for all libraries" (Society of Chief Librarians, 2015), which is actually a digital platform for public libraries within England, while in Chapter 11.4 a range of archives-based aggregators was described. All these are important within the particular institutional form, but are bounded by politics and/or organisation and thus maintain a fragemented approach to development; sustaining rather than transformational.

Equally, the instant two-way nature of communication has been taken up in a diversity of Web 2.0 social networking and mobile applications, generally based around individual institutions, while the ubiquitous institutional website has extended reach by supporting transactional services as well as being a marketing tool and as a means of providing information about the services of the institution.

There are examples of collecting institutions widening user access to collections by building presence on private sector services such as Wikipedia, a service that, at the same time

contests the traditional library enquiry desk with its 24/7 user-friendly ecosystem: the personal device has become the destination (Lih, 2009).

All of these examples provide glimpses of the future value of exploiting the opportunities of the first of the Generic Drivers of Change. Generally, however, collecting institutions have followed the evolutionary approach of established service industries and used the Internet to deliver services around their core institutional mission (sustaining the status quo). In consequence, activity to create digital simulacra of artifacts is focused on mirroring the collection of the particular institution, rather than prioritising 'themed' aggregation as already done for genealogy, where the source of the archival record is secondary to the sought information.

14.3.2 OPPORTUNITIES FROM THE REDEFINITION OF SPACE AND TIME

Features of Generic Driver of Change	Opportunities for Collecting Institutions
Instant connectivity: to any node on the global network defeats the concept of distance	The means of significantly increasing audience reach, widening access to collection resources and interaction with users
Internet time: creates rapid innovation and diffusion within society	Testing new approaches to service provision that are scalable across a wide range of collecting institutions Potential for increasing number of options available to exploit digital resources
Users: are able to compress more activity into a time period	Redefine service propositions to meet the changing needs of users. Meeting the needs of the 'harvester' for integration and 24/7 access
Transmission costs: are independent of distance and time	Digital service offers may be enriched and repurposed at low cost and well designed online services should reduce unnecessary travel

Table 14.2 *The Internet redefines space and time*

The ways that the Internet redefines space and time have important implications for collecting institutions. When exchanges can take place between devices connected to a single network, rather than with many fixed locations, the searcher becomes *harvester* rather than *hunter*. Online relationships do not depend on opening hours or the need to travel, increasing accessibility and choice for the individual at lower transaction costs (time, fares, etc). For the supplier, the ubiquitous nature of the Internet means that new audiences may be reached at no more than marginal cost; phenomena that apply equally to collecting institutions.

Twenty years ago, what might be a collection only easily accessible by those nearby the museum, library or archive, may now become available to a global audience through digitisation plus good design. Lynch's (2011) comment in Chapter Eleven that, "…digital representations were no longer just surrogates for the physical objects, being as useful and, in most cases more accessible and more robust than the original object", highlights changing social attitudes towards traditional collections, despite the fact that there are different attitudes and challenges across museums, libraries and archives. Already, libraries face the practical challenge of managing the financial and organisational issues arising from shifting media formats as ebooks, ejournals and online knowledge assets contest traditional service forms and business models.

On the demand side, as Chapter 11.3 described, many researchers and academics expect to find all materials at their terminal, avoiding the need to visit libraries.

Despite increasing networking of topic-related resources at The National Archives[151], along with museums, archives have faced conflicting views about the relative importance of accessibility over curation. (Chapter 11.4). Across the museums sector, wide adoption of digital techniques for service delivery is less visible (Chapter Nine). The **Museum 2020** consultation exercise produced conflicting views on the importance of impact over collection curation (Museums Association, 2012). Two examples demonstrate the reasons why the harvesting effects of altered space and time might be of high social value and meet better museum audience needs:

1. **Free access to national museums in England**: for over 15 years it has been government policy that access should be free to all national museums. However, for a family of four living in Manchester wishing to view the collections of, say, the National Gallery in London, the costs of travel and accommodation will almost certainly be prohibitive. Therefore free access is irrelevant. The policy is only of value to 'locals' and to those visiting the city for other reasons, for example, tourism. Generating high-value experiences of the national museum collections online could dramatically increase access for the whole nation and, indeed, for a global community. A selection of the National Gallery's collection is already available for interactive use – walk through, high resolution images and interpretation on the Google Cultural Institute[152], yet there is no explicit link to that resource in the National Gallery's website[153]. (This is not a unique situation since other national collections with resources in the Google Cultural Institute appear to have a similar blind spot).

2. **Museums 2020**: Chapter 9.10 reported on the Museums Association's wide consultation exercise. In the initial discussion document reference is made to the environmental impact of travel:

   > "The biggest area of museum energy use is probably visitor travel. There is a growing literature that argues in favour of museums focusing more on a local audience and less on tourists." (Museums Association, 2012, p6)

   Yet, aside from comments by the third-sector stakeholders group that, "…the difference between the physical and the virtual is narrowing…" (Museums Association, 2013, p8), no reference is made to the possibilities of using well designed and integrated

[151] Themed digital collections on The National Archives website. Available at: http://www.nationalarchives.gov.uk/records/our-online-records.htm [accessed 30th August 2014]
[152] The point must be made that the National Gallery does have a range of video guides and other information about its collections online, but it is not clear why the crafted interactive nature of the Google Cultural Institute is not included as a link. Available at: https://www.google.com/culturalinstitute/collection/the-national-gallery-london?projectId=art-project [accessed 29th August 2014]
[153] The only reference on the site relates to press releases concerning the launch of the Google Art Project, the precursor to the Google Cultural Institute. http://www.nationalgallery.org.uk/national-gallery-and-the-google-art-project [accessed 29th August 2014]

collections online to satisfy at least some of the needs of users, wherever they might live and whenever they wish to gain access.

These examples, where digital simulacra might act successfully as substitutes for the 'physical objects in fixed locations', highlight important reasons for collecting institutions to consider the longer-term implications of the impact of the Internet's ability to reformulate space and time to users' advantage.

14.3.3 OPPORTUNITIES FROM INTERNET GRAVITATIONAL FORCES

Features of Generic Driver of Change	Opportunities for Collecting Institutions
Scale: successful services get big	Powerful argument for horizontal integration of online services creating a valued and distinctive identity for public collections on the wider Internet
Growth: the big get bigger	
Impact: the gravitational force affects both the supplier and the user	Setting the development of new paradigms to deliver maximum value to online users ahead of the existing organisational structures, norms and values

Table 14.3 *The Internet possesses its own gravitational forces*

Of the four sets of opportunities derived from the Generic Drivers of Change the value of massification to collecting institutions and their users is the least explored within the literature. The evidence of the outer world demonstrates that gathering resources together in one user-friendly interface is an important factor in adding value both to the user and the supplier. Abe Books, described in Chapter 4.3.2, is a clear of example of win/win; the bookseller has a global customer base, while the user is able to search every supplier at once. The aggregation services described in Chapter 11.6.2 each offer a lens to focus search in one place, yet the literature contains little evidence of the impact on collections of Internet Gravity[154]. However, as noted in 14.3.1 above, while users value easy access to the widest range of resources, the majority of collecting institutions, operating with the Institutional Paradigm, see such aggregation primarily through a lens of institution value. Redefining value within the context of Internet Gravity will be an essential element in disclosing collections and services to achieve maximum audience reach and user loyalty.

[154] The exception is the work by research staff at OCLC on the future role of library collections (Dempsey, 2014; Dempsey, Malpas and Lavoie, 2014a), reported in Chapter 11.5.

14.3.4 **OPPORTUNITIES FROM THE REDEFINITION OF SUPPLIER/USER RELATIONSHIP**

Features of Generic Driver of Change	Opportunities for Collecting Institutions
Innovation and risk: low risk/cost of testing new ideas; scalability incremental; competition – online offers never stop evolving	The exemplars of global services scaled from small beginnings present radically new approaches to innovation for collecting institutions testing disruptive ideas and in justifying new collective structures and approaches to innovation
User focus: understanding the user comes first; user driven services; partner and co-creator	The body of knowledge on user behaviour in the outer world of the Internet provides a foundation for collecting institutions to develop much closer understanding of user needs, behaviours and engagement, and, as above, develop collective mechanisms for action
Skills shift: new skills – science of user engagement; technological solutions and design; user as supplier	Means to redefine both what skills will be required in the future and how they might best be deployed to maximum advantage. Future convergence of digital services through sharing specialist skills could improve the quality of the user experience while reducing the direct costs to individual organisations
User effects: Always on, 24/7 services where convenience may trump comprehensiveness and trust	In an increasingly competitive online environment the collecting institutions' offer must make clear their unique value and maintain user convenience and value by constant engagement and digital service evolution

Table 14.4 *The Internet redefines the relationship between the supplier and the user*

The changing relationships between the user and the supplier is a product of the effects of the first three Generic Drivers and it is the dynamic of these changes that sit at the heart of validation of the Research Hypothesis. For all organisations whose mission is to offer services to meet a demand, whether public or private, the exchange process is key to success, topics explored in both Chapters Four and Six. None of the four features of this Generic Driver represent uncharted land for collecting institutions. Innovation and risk, user focus, skills shift and user effects have been identified in the analysis processes of Part Two. Yet almost all of that evidence points to evolutionary, sustaining change based around the Institutional Paradigm. For example, the types of user research to be observed in collecting institutions, whether individually or collectively, are of a completely different scale and utility when compared to the *science of user engagement* described in the outer world narrative of Chapter Four.

The examples of innovation around collections in Chapter 11.6.2, such as People's Collections Wales, YourPaintings and the Digital Public Space, have the potential to provide greater momentum towards radically new ways of exploiting digital innovation alongside building new forms of relationships with users. But all are currently in the early stages of development and represent small, one-off steps towards *possible* strategic change. Only the private sector led genealogical services (Chapter 11.6.1) provide large-scale integration of collecting institution assets packaged within high quality user environments.

Of substantial evidence of radical change in practitioner skills sets, little is to be found. The appropriate skills, managed within *fit for purpose* organisational structures, will be essential to

deal with all of the opportunities described in Tables 14.1 – 14.4. This brings into question the issues of what kind of structures will be required and whether the skills should form part of the basic armoury of all practitioners of new, multi-disciplinary teams created – the *digital heritage diaspora* (Parry, 2013).

14.4 THE CONSTRAINTS OF THE INSTITUTIONAL PARADIGM

The final step in the process of comparison takes the opportunities identified for collecting institutions in the previous section and sets them against the features of the Institutional Paradigm to demonstrate the constraints to be overcome to gain most advantage from the Internet. This process is presented in the four Tables below, one for each of the Generic Drivers. The Tables are followed by a commentary on their implications:

1. THE INTERNET AS DIGITAL COMMON CARRIER	
GENERIC DRIVER OPPORTUNITIES FOR COLLECTING INSTITUTIONS	CONSTRAINTS OF THE INSTITUTIONAL SERVICE PARADIGM
Single channel, Internet protocol, Convergence • Aggregation of different forms of material into a common knowledge base • Aggregation provides the mechanism to build a comprehensive, integrated repository of resources across all knowledge institutions. • New forms of interpretation possible, recycling the same resources to meet different needs • Widening user access to collecting institutions' resources, maximising range of choice through a user-focused interface and extensive resource aggregation • The means to differentiate collecting institutions' services from external online competition	Limitations to convergence • Vertical integrated silos restrict the possibilities for horizontal collaboration • Fragmentation of service priorities within and across sectors • Lack of Home Nation or UK-wide policies • Lack of shared purpose across museums, archives and libraries and lack of co-ordinating body • Range of unconnected aggregation services • Practitioner worldviews prioritise physical collections in fixed locations
Instant two-way communication • Two-way engagement draws users in to share their views and knowledge, encouraging sustained use and learning	• User focus defined by institution type and the particular organisation, so the nature and design of engagement will be highly fragmented

Table 14.5 *The Internet as digital common carrier*

2. THE INTERNET REDEFINES SPACE AND TIME	
GENERIC DRIVER OPPORTUNITIES FOR COLLECTING INSTITUTIONS	CONSTRAINTS OF THE INSTITUTIONAL SERVICE PARADIGM
Instant connectivity • The means to increase audience reach, widening access to collection resources and interaction with users	• User focus defined by institution type and the particular organisation, so the nature and design of engagement will be highly fragmented
Internet time • Testing new approaches to service provision that are scalable across a wide range of collecting institutions. Potential for increasing number of options available to exploit digital resources	• Organisation structure and tradition resists strategic change due to risks of financial and social penalties if mistakes are made. Innovation is 'sustaining', within organisation structures of power and procedure.
Users • Redefine service propositions to meet the changing needs of users. Meeting the needs of the harvester for integration and 24/7 access	• User focus defined by institution type and the particular organisation, so the nature and design of engagement is highly fragmented. • Lack of Home Nation or UK-wide policies • Lack of shared purpose across museums, archives and libraries and lack of co-ordinating body • Practitioner worldviews prioritise physical collections in fixed locations
Transmission costs • Digital service offers may be enriched and repurposed at low cost and well designed online services should reduce unnecessary travel	

Table 14.6 *The Internet redefines space and time*

3. THE INTERNET POSSESSES ITS OWN GRAVITATIONAL FORCES	
GENERIC DRIVER OPPORTUNITIES FOR COLLECTING INSTITUTIONS	CONSTRAINTS OF THE INSTITUTIONAL SERVICE PARADIGM
Scale, Growth • Powerful argument for horizontal integration of online services creating a valued and distinctive identity for public collections on the wider Internet	• Vertical integrated silos restrict the possibilities for horizontal collaboration • Fragmentation of service priorities within and across sectors • Lack of Home Nation or UK-wide policies • Lack of shared purpose across museums, archives and libraries and lack of co-ordinating body • Practitioner worldviews prioritise physical collections in fixed locations
Impact • Setting the development of new paradigms to deliver maximum value to online users ahead of the existing organisational structures, norms and values	

Table 14.7 *The Internet possesses its own gravitational forces*

4. THE INTERNET REDEFINES THE RELATIONSHIP BETWEEN THE SUPPLIER AND THE USER	
GENERIC DRIVER OPPORTUNITIES FOR COLLECTING INSTITUTIONS	CONSTRAINTS OF THE INSTITUTIONAL SERVICE PARADIGM
Innovation and risk • The exemplars of global services scaled from small beginnings present radically new approaches to innovation for collecting institutions testing disruptive ideas and in justifying new collective structures and approaches to innovation	• Public sector organisations are for practical and normative reasons risk averse. • Innovation is based on sustaining the existing service paradigm • There is no mechanism for central co-ordination across collecting institutions
User focus • The body of knowledge on user behaviour in the outer world of the Internet provides a foundation for collecting institutions to develop much closer understanding of user needs and behaviours and, as above develop collective mechanisms for action	• The vertical integration of institutions has constrained collaboration on the study of user behaviour both within sectors and across them • In consequence the implementation of shared action to understand users and their behaviours and needs have only taken place either in very generic ways, for example the development of learning programmes, or quite specific audience needs within academic libraries
Skills shift • Means to redefine both what skills will be required in the future and how they might best be deployed to maximum advantage. Future convergence of digital services through sharing specialist skills could improve the quality of the user experience while reducing the direct costs to individual organisations	• There have been only limited studies on the need for new skills or how they might best be managed for maximum value • As noted elsewhere, the existing paradigm blocks opportunities to create centralised service functions able to *direct* local action
User effects • In an increasingly competitive online environment the collecting institutions offer must make clear their unique value and maintain user convenience and value by constant engagement and digital service evolution	• While the vast majority of collecting institutions have a Web presence they are of mixed quality and with over 2,000 sites and limited aggregation unique value and convenience are the victims of fragmentation

Table 14.8 *The Internet redefines the relationship between the supplier and the user*

14.4.1 **COMMENTARY ON THE CONSTRAINTS OF THE INSTITUTIONAL PARADIGM**

These comparative tables (14.5 – 14.8) show the constraints placed on opportunity by the Institutional Paradigm. The synthetic process of juxtaposing phenomenological evidence of the Generic Drivers with that of the digital operations and developments of collecting institutions, aggregated from a wide range of data analysed in Part Two, highlights stark disparities between the inner world of collecting institutions and the outer world beyond. These comparisons are made across general concepts, but there is little evidence from Part Two that the broader, more flexible and more innovative and convergent approaches implied by the Generic Driver opportunities are being adopted. This thesis began in Chapter One with a Research Hypothesis challenging the future utility of the Institutional Paradigm in online service delivery:

The existing paradigm(s) of collecting institutions defined by the requirement to provide public value from physical collections in fixed locations may not be able to accommodate successfully the development of online service offers that are distinctive in form and maximise public value through alignment with trends in user needs and behaviours.

Table 14.9 – Research Hypothesis

Tables 14.5 - 14.8 make clear that there are significant differences between the dominant service paradigm of collecting institutions (and much of the rest of the public sector) and the strategic trends observed beyond the public sector. From this evidence it is possible to conclude that the Research Hypothesis is validated - that the Institutional Paradigm *will not* be able to accommodate successfully the development of online service offers that are distinctive in form and maximise public value through alignment with trends in user needs and behaviours.

Given the range of evidence from collecting institutions and from wider socio-technical trends presented in Part Two this conclusion may not be surprising. Phenomena including fragmentation, silos, institutional focus, lack of policy direction and practitioner conservatism mean that collecting institutions have not been able or willing to act either collectively and/or comprehensively in the digital space. Despite a decade of subsequent development there remains no resourced policy framework relevant and supportive to all collecting organisations across the UK, or indeed, fully implemented in any of the Home Nations[155]. More generally, the many aggregation services, national and international, often remain, in Geser and Pereira's words (2004), "many islands with very different islanders" disconnected from each other.

14.5 CHAPTER SUMMARY

Chapter Fourteen presents an important milestone in the journey towards the completion of this research. It has drawn comparisons between the key features of the Institutional Paradigm and the Generic Drivers of Change to highlight both the opportunities presented to collecting institutions and the constraints that may need to be overcome to achieve maximum value for their services within the digital space.

Validating the Research Hypothesis based on an extensive range of phenomenological evidence represents, of course, an important juncture in the research, but it does not signify an end state. Research Objectives 8 and 9 defined as end state the point at which it might be possible to model key questions, priorities and strategy that might enable practitioners and policymakers to reflect on how the gulf described above might be bridged now and in the future. The critical constituents of this Chapter are, therefore, as much about presenting clear statements of the differences as about simply making the point that the evidence supports the

[155] The Welsh Government through CyMAL is implementing strategies for collecting institutions, but integration through the use of the Internet is a project still under implementation. Available at: http://wales.gov.uk/topics/cultureandsport/museumsarchiveslibraries/cymal/?lang=en [accessed 2nd February 2014]

argument put forward in the Research Hypothesis. The statements, about the inner world and the outer world and their relationship, while challenging to the status quo, at the same time provide the framework for reflection about the future. Deriving the modelling and framework for this is the task for Chapter Fifteen.

CHAPTER FIFTEEN
Change and the Need for a New Ecology

15.1 CHAPTER PURPOSE

> **"**For public sector organisations across the world, the pressures for improved efficiency during the past decades are now accompanied by an equally strong need to revolutionise service delivery to create solutions that better meet citizens' needs; to develop channels that offer efficiency and increase inclusion to all citizens being served; and to re-invent supply chains to deliver services faster, cheaper, and more effectively." (Brown, Fishenden and Thompson, 2014, p1)

This extract from a recent paper issued by the Judge Business School at the University of Cambridge is a reminder that despite the challenges described in Chapter Fourteen, there are compelling reasons to find mechanisms to enable practitioners and policymakers to reflect on what should be collecting institutions' strategic priorities for the future exploitation of the Internet. The opportunities to deliver faster and more effective services were addressed in Chapter 14.3; additionally, at a time of reducing public investment, collecting institutions must consider whether, in finding innovative ways of managing and delivering services using the Internet, they can reduce transaction costs while still increasing user value.

Chapter Fifteen investigates how, despite the constraints of the Institutional Paradigm and falling funding, the opportunities of the Internet might better be exploited strategically for all types of collecting institutions (Research Objectives 6 and 9, - see Chapter 12.1).

15.2 THE DIALECTIC OF CHANGE

The implications of the Generic Drivers of Change point towards collecting institutions presenting to the user as a single digital supply chain rather than the heterodox landscape that is to be observed today - akin to the way that gov.uk has changed the relationship between the online user and government services. To identify a strategic trajectory of change, first the key foundations for a new approach must be identified. *Fragmentation* is a phenomenon cited in a number of chapters as a significant barrier between the Institutional Paradigm and the changes defined by the Generic Drivers of Change. Prior to channel convergence and Internet Gravity becoming realities, collections were available solely in fixed locations, making such fragmentation the norm. Users might travel to more distant institutions when necessary and could do little but tolerate a diversity of regulations, opening hours and rights of access to collections. As Chapter Four demonstrated, today's online user is far less accepting of such constraints. For the knowledge harvester, travel becomes preference rather than necessity, while ease of discovery and fulfilment are sovereign. This research does not suggest an either/or choice between place and space in future developments. Its purpose is to demonstrate that the Institutional Paradigm does not fit well with the development of user-friendly online

services and to propose a more strategic and collaborative pathway for the delivery of maximum value and long-term sustainability online.

It is helpful to consider differences between the physical and the virtual within the phenomenology of Hegel's dialectic, where the resolution of the tension between *thesis* and *antithesis* should lead to *aufheben*, literally to lift up (Redding, 2014). Through dialogue between thesis and antithesis the intention is not simply to find an acceptable compromise, but to *overcome* (rise above) the differences by identifying what is significant to retain and what to set aside. The interpretation of *aufheben* in this context has generated significant academic study since in Hegel's use of it he implies the double meaning of both changing and preserving (Palm, 2014; Derrida, 1982). Wikipedia attempts a simple definition:

> "…preserving the useful portion of an idea, thing, society, etc., while moving beyond its limitations."[156]

So far the research has exposed the phenomena of wider socio-technical change and the contemporary context of collecting institutions, identifying key differences (thesis and antithesis). Table 15.1 summarises the wider socio-technical effects of the Generic Drivers of Change set against key characteristics of the Institutional Paradigm:

Thesis – Generic Drivers of Change	Antithesis – Institutional Paradigm
Potential of Internet to increase social value of collecting institutions	Institutional Paradigm and lack of strategic planning
New relationship between supplier and user, new business models	Importance of status quo Long-established service patterns
The importance of presence in the digital space to meet emergent behaviours and build wider audiences	The value of the institution as physical destination
Rapid innovation and diffusion	The risks of radical change
Implications of strategic change	Constraints of structure and resources
Digital channel convergence	Organisational fragmentation
Globalisation from gravitational forces	Localism and vertical integration
Need for one voice and one message to promote collective value nationally	Absence of explicit shared mission across collecting institutions.

Table 15.1 *Thesis and antithesis in the digital space*

The Table does not resolve uncertainties about the future. Rather it provides a series of agenda topics for reflective and collective consideration by practitioners and policymakers, to achieve *Aufhebung* (lifting up) - what to preserve and what limitations to move beyond. The concept is relevant to this research since moving beyond the present fragmented landscape is an essential feature of a future strategy for collecting institutions' engagement with the digital space. The first step on the journey must be collective ownership by those directly involved with policy and management.

The sections that follow consider the challenges to be faced in resolving the dialectical differences of Table 15.1. Section 15.3, from the evidence of Part Two and Chapter Fourteen,

[156] Wikipedia entry. Available at: http://en.wikipedia.org/wiki/Dialectic [accessed 26th September 2014]

presents Three Strategic Challenges that call for urgent reflective debate as the first stage of collective action. Section 15.4 sets out proposals conceptualising and justifying the action and, in Table 15.4, models a new service paradigm through which to justify the case for a shared approach to digital innovation across collecting institutions.

15.3 THREE STRATEGIC CHALLENGES TO THE STATUS QUO

There are, of course, many reasons why collecting institutions engage with the Internet. They include the means to manage the cataloguing and documentation of collections in ways that enable data interchange, as tools of marketing, as the means of disseminating widely information and knowledge, and enriching the visitor experience in the physical collection. As has been demonstrated in Part Two, such developments are invariably rooted in a technical rationality that focuses on techniques to deal with particular short to medium term opportunities or challenges. The examples below, drawn from Part Two, highlight fundamental questions that must be resolved in the development of a more strategic future, identifying the significant factors in the process of *Aufhebung*.

15.3.1 **QUEST FOR COMMON PURPOSE**

Despite the identified constraints of the Institutional Paradigm, so long as there is demand for and the resources to maintain collections in fixed locations, it is likely that they will remain closely linked with some local parent organisation defining service priorities within the context of particular audience needs, whether local community, community of interest or institution of learning. That suggests it will be impracticable to reject outright the current paradigm for some alternative. Thus, if new approaches to digital change are considered it will be important that they are able to exist in a stable binary relationship with the Institutional Paradigm. Perhaps the most obvious mechanism to connect across this relationship is the adoption of a Shared Mission Statement relevant to both physical and digital spaces, building on the outcome of Chapter 13.5.

A collective mission is an essential antidote to current fragmentation. Both as the collaborative foundation to exploit channel convergence and the Internet's gravitational force, and as the route to a single, strong message for advocacy and influence at national policy level. There is a further point to make concerning the need for a clearly articulated mission; regarding particularly strategic choices about the Internet. That is the changing nature of the outer world:

> "In strategic management the robustness of a strategy is often estimated in terms of strategic fit; that is the degree to which the shape of the organisation is congruent with and mutually supportive of its environment. If the environment changes then we lose fit and the organisation starts to fail." Hodgson and Sharpe, 2008, p111)

To make judgments about strategic fit requires clarity of both strategy and purpose, for institution, organisation or sector. In the more stable past this may not have been a significant issue, but within the context of present and future socio-technical change issues of user demand, competition and contestability have emerged to challenge traditional collecting

institutions' roles (see Chapters Six and Eleven). For example, libraries face major challenges from media formats such as ebooks and online information services contesting their previous monopolistic status from within the shadow of cuts in funding, while all collecting institutions must try to deal effectively with the revolution created by the digital image, whether between collections or the massive quantities of user-generated content now stored in services such as Flickr (Chapter 11.6.1, exemplar 5). The lack of a compelling mission statement associated with strong advocacy risks more fragmentation as service scope and standards increasingly vary from place to place. Finding common ground in a single mission is, therefore, a fundamental step in discussions about closer integration of digital strategy across collecting institutions.

15.3.2 THE BOUNDARY EXCHANGE: FROM HUNTER/GATHERER TO HARVESTER

Chapter Four demonstrated that, for the majority of citizens, the Internet has become an essential component of living whether for business, learning, managing their lives or for entertainment. The personal device and instant interaction has generated social change akin to the agrarian revolution of Neolithic times (Johnson, 2000). The user has the chance to reap a richer harvest while managing the use of their time in new ways. For suppliers online, new services have been facilitated and understanding of users greatly enhanced. These emergent behaviours and opportunities are the result of the effects of the Generic Drivers of Change. While the effects are not yet universal, the evidence of Chapter Four shows there is an overwhelming majority of the population rapidly becoming *tech savvy* in the use of networked technologies ranging from mobile phones, tablets, traditional desktop computers to wifi connected televisions. The chapter also showed that use and demand continue to increase, suggesting that the Network Society is already a well-established phenomenon and will over time become ubiquitous – a social revolution. These changing relationships raise urgent issues that collecting institutions must address in developing future strategies dealing with the relationship between supply and demand at the boundary exchange:

i. **Supply Side: Responding to the harvester phenomenon.** The ability of the online user to engage with a whole world of knowledge and information is shown by the discoverability offered by Google and other successful search engines and by the ease of use of services such as Facebook and YouTube. In **Too Big to Know** Weinberger (2012) introduces the concepts of back-end and front-end filtering as metaphor for the difference between pre- and post-Internet worlds. His argument is that in traditional paradigms of knowledge management (libraries, museums and archives, for example) decisions about what to make available were made by practitioners - *back-end filtering,* so the user always had limited choice. The Internet's paradigm is different; the process of selection allows the user to narrow their search - *front-end filtering* - dismissing material not relevant, yet that filtered out material is still available for the searcher to return to.

While there may be flaws of detail in Weinberger's argument, it is valid in the sense that the body of knowledge and information is no longer constrained by physical limits and the power of selection has become shared between the search tools and the user. He underlines the

importance to success of Internet Gravity, to build a collective body of knowledge, presented within a single channel. For collecting institutions engaging with the Internet this underlines the need for a clear and collective sense of purpose, with the user placed at the very heart of all service design and development. Collecting institutions must be as good as the very best outer world online services, able to compete successfully in capturing the time and attention of users while demonstrating their unique collective value. The current fragmentation of institutions' digital developments works directly against the national promotion of social value and an ambitious long-term future: to repeat O'Connor's words in Chapter 11.3, "value that is not valued is not valuable". (2013, p270)

There is a further matter relevant to harvesting behaviour and the boundary exchange. This is the challenge of open access. The synthesis processes of the last two chapters have demonstrated that success will depend on a single user-friendly access route into the largest possible set of digital assets from collecting institutions as exemplified by Merrit's distributed museum (2014) and the examples cited below in footnote 144. Setting aside the technical issues of data formats, large scale aggregation will depend on the willingness or ability of institutions to loosen the ties of their digital assets so that they can be readily aggregated in support of the *greater good*. Some institutions, particularly those with unique, high value collections remain cautious about letting go of their digital collections for wide and open use, focusing access on the institutional website, whether to protect the brand or due to concerns about uncontrollable misuse. The issue of open access has also been faced in practitioner communities where the digital walled gardens of commercial publishers have created barriers to wider accessibility[157]. Neither of these matters has a simple solution, but progress towards wide access will only be made with a shared commitment across all collecting institutions.

ii. **Supply Side**: **Confidence and clarity about the value of the virtual and the value of the physical:** The evidence of Part Two demonstrated that the integration of digital resources and techniques has seen them being treated as an adjunct to existing assets and services – growing out of the existing service portfolio. For museums this has seen digital techniques frequently focused on new ways of engaging with and interpreting the physical collection. In libraries the issue has been how to manage access to ejournals and ebooks in ways that meet the requirements of publishers, audiences and budgets. For archives, while significant digital collections of archival documents have been created, they have been focused mainly on large, well-funded collections.

Without doubt all of these innovations add value to the user experience, but from the evidence of Chapters Eight through Eleven it is clear that there has been little research to explore the underlying differences of the real and the virtual beyond how they are managed. Chapter 4.3.4 reported Tredinnick's (2008) analysis of the differences between the physical and the virtual;

[157] See for example the work of PLOS, the Public Library of Science. Available at: http://www.plos.org/open-access/; Jisc Open Access programme. Available at: http://www.jisc.ac.uk/open-access [both accessed 15th February 2015]

loss of *authentic provenance*, *fragmentation* of sources and content, the *disintermediation* of online supply. Comparison of the traditional collection of printed photographic images with contemporary online services such as Flickr (Chapter 11.6.1) underlines the shift of both control and opportunity that has taken place in the past ten or so years. However, a paradigm that leaves the institution to make local decisions about how to use and present digital collections will never be able to take full advantage of the power of the Internet demonstrated by the four Generic Drivers of Change. For these reasons it is important that strategic approaches are developed for collective understanding of the worth of the physical and of the virtual. That must begin with a fundamental commitment to make collections as readily accessible as possible to the widest possible audience – to exploit to the full the single channel and gravity of the Internet.

iii. **Demand Side: Learning as Leitmotif.** Across more than 150 years, from the emergence of collecting institutions as merit good public services in the mid 19th century, when education was a fundamental mission, to the synthesis of the Shared Mission Statement of Chapter 13, learning has remained the central role for all collecting institutions. Understanding the processes of learning as an exchange relationship between the service and the user in the digital space, is therefore of paramount importance to future success. For institutions such as school and academic libraries their contribution to learning is defined by particular educational structures and needs. For other institutions learning is frequently used as a generic concept for one sort of outcome.

The analysis in Part Two showed, with few exceptions, little evidence that practitioners have understood that there are a variety of components and approaches to successful learning experiences. The work of the Museums, Libraries and Archives Council on the evaluation of learning outcomes (MLA, 2006), the National Institute for Adult Continuing Education on engagement with lifelong learning (Innocent, 2009) and the various user studies described in Chapter Eleven, illuminate particular aspects of learning. Yet, without far wider understanding of the components and various approaches to learning, it will be impossible to design systems able to exploit digital resources to satisfy users with different learning needs and behaviours at different times. Learning risks being no more than a badge of advocacy and service justification. While in the physical space the user has been sufficiently motivated to assign time to travel to an institution for learning either formal or informal, in the digital space, if the resource does not immediately match the user's needs, they will almost certainly immediately go elsewhere. If the online boundary exchange is to accommodate a wide range of different needs with maximum effect, far greater collective understanding of what is meant by learning will be necessary. Contemporary learning theories offer the kinds of insight that will be necessary. For example:

- **Learning as change in the individual:** change may be in behaviour or in the way people "understand, or experience, or conceptualise the world around them" (Ramsden, 1992, p4)
- **Learning as process, learning as product.** Säljö (1979) illuminated this difference in a study examining what adults understood by learning. It can be the acquisition of facts, skills and methods that can be retained and used as necessary (product) or, learning as

interpreting and understanding reality in different ways - comprehending the world by reinterpreting knowledge (process).

- **Emergent learning theory** (Siemens, 2006) and heutagogy (Garnett, 2006) focus on the use of networked-based knowledge resources to empower individuals and communities to construct their own learning journeys frequently involving collecting institutions' resources.

These are brief descriptions of a range of research and practice that might be applied to the design of the presentation and interactivity of the boundary exchange. Table 15.2 presents the elements as an example of how learning as exchange process might be analysed. The flow diagram shows user interaction as a learning curve. The user *seeks* the answer to some need – formal or informal study, social information, enjoyment, distraction – which is addressed by the *presentation* of digital objects. If the interaction is successful, a process of *apprehension* (understanding or grasping) takes place, producing an *effect* that meets the need. P*resentation* to achieve *apprehension* is therefore at the core of successful learning.

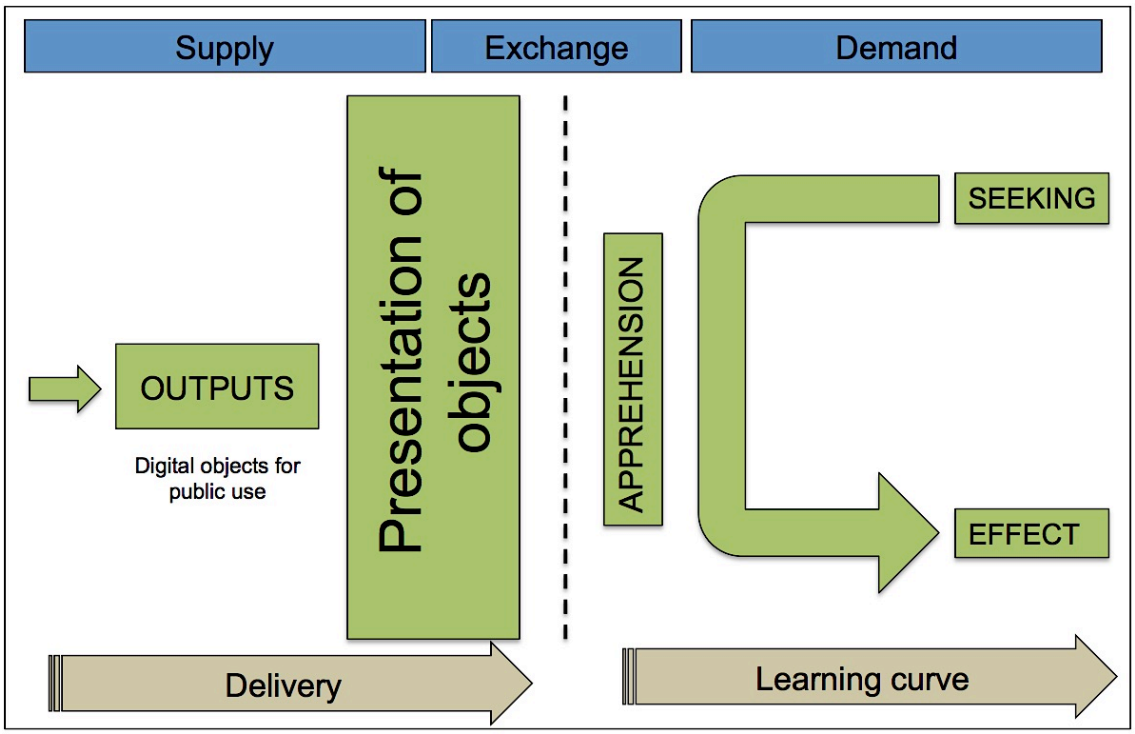

Table 15.2 *Example of disaggregating the Boundary Exchange*

15.3.3 THE SPEED OF INNOVATION AND CHANGE

The third significant challenge relates to the difference between the rate at which digital innovation and its diffusion takes place and approaches to innovation within and between collecting institutions. Chapter Six identified the importance of stability and continuity of service provision across all public sector services. It also drew attention to the *permanence* of collections in their physical form, whether due to the importance across generations (museums, archives) or collecting particular commercially available media forms (libraries), for example. Chapter 11.6.2 reported examples of digital innovation involving collecting institutions. However,

none of these has the mandate or the resources to support and co-ordinate across the whole of the UK for all collecting institutions and indeed, there is no evidence to suggest that there is committment to innovation and change at the rate to be observed in the outer world. As a result there is the risk that digital innovation will always be reactive, uneven and unable to present a single consistent user-centred access route (Table 13.15). This echoes the statement by Hodgson and Sharpe (2008) about the loss of strategic fit if the organisation's shape and mission are not 'congruent' with the environment.

The dialectical challenges concerning innovation, change and risk in Table 15.1 pose a number of difficult questions for practitioners and policymakers, that may, in the digital space, require radical change in how strategic policy, management structures and risk sharing should be managed in the future. Currently, different approaches are being taken in different parts of the collecting institution sector, defined by institutional form, particular outcomes (education and learning) or by geography (Home Nations). The principles of shared responsibility and horizontal accountability essential to collective action run contrary to the core paradigms of the public sector. To go beyond these differences will demand first the achievement of pan-sector support for the process of collective innovation and development.

Of the challenges laid out in Section 15.3 the process of bridging the dialectical innovation divide presents the most practical difficulties. That is not to dismiss the need for a Shared Mission Statement or new relationships with the user as simple problems to solve collectively. Yet the issue of responding to, or better, inventing a future in the 'outer world' tests the very foundations of public sector paradigms that favour stability, local decisions and risk aversion.

15.3.4 REFLECTION ON THE THREE STRATEGIC CHALLENGES

There are two important themes that run through Section 15.3, strongly reflecting the hermeneutic phenomenological approach being taken in this thesis. These are the systemic need for commitment to collective action to progress, set against the need for far greater understanding of the fine grain of boundary exchange processes; the causes and effects of presentation and the learning process. In the digital space the relationship with the user becomes the central component of development. The front-end mechanisms should be simple to use by a variety of different user types, offer personalisation and deliver consistently to the highest standards. This implies organised and structured collections aggregation so that, while the resources may be accessible through many online access routes, there should also be a single channel that to the user is a trusted source with a collective brand identity of quality.

Section 15.3 has described serious challenges facing collecting institutions that will only be overcome by strong, collective action. A dramatic example of the success of strong action for change in the public sector is the success story of gov.uk, central government's single service portal (Chapter 6.2.2). For collecting institutions, such change will not happen overnight either across the UK or in each of the four Home Nations. However, without commitment to a journey towards a shared digital future these Strategic Challenges may become insurmountable barriers to success in the digital space.

The UK is not alone in having to face up to such challenges. A recent study led by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia reported:

"…an analysis of Australia's galleries, libraries, archives and museums has revealed that digital innovation in the sector is inconsistent and isolated." (Commonwealth Scientific and Industrial Research Organisation, 2014)

Among the study's recommendations are actions that resonate loudly with the Three Strategic Challenges described above (Mansfield et al, 2014):

1. A national framework for collaboration to create easy and seamless access to the distributed national collection:
    - Prioritising access by standardised aggregation;
    - Skills and organisational change;
    - Shared infrastructure.
2. National leadership and collaboration forum.

15.4 FROM ORGANISATIONAL ECOSYSTEM TO DIGITAL KNOWLEDGE ECOLOGY

> "The ecosystems metaphor is often used by scholars, business journalists and practitioners to informally describe the connections among organisations that share common or complementary features, and that motivate or facilitate some form of exchange of information or other resources…They can develop from the top down, which is most often the case within centralised, government-controlled economies or where market monopoly may exist. Alternatively, Organisational Ecosystems can grow from the bottom up, as in competitive market-oriented economies where individual actors reject or accept market offerings and with change movements that emerge within societies where actors have the relative freedom to socially or politically organise." (Mars, et al, 2012, p275)

There are several reasons why this quote is a useful opening at this point. First, it provides a context of why and how the ecosystem metaphor may be used for organisations. Second, the identification of two modes of evolution – top-down and bottom-up – offers a helpful route into the complexity of how institutions rooted so firmly in the Institutional Paradigm might re-conceptualise their strategic future in the digital space.

The concept of the ecosystem has been widely applied in organisational and social research as a metaphor using the patterns and relationships of ecosystems in the natural world (Briscoe et al, 2012; Mingers and White, 2010; Levy, 2012). Since the turn of the Millennium and the increasing impact of the Internet there have been studies on how to manage the knowledge and information explosion. Spivak and Por (2000), writing for the European Commission, underline the significance of co-ordinated systems that deliver value through the interaction of knowledge, people and technology, while more recently Chatti, Jark and Quix (2010) have developed the concept of knowledge ecology as a *social landscape*, underpinning contemporary learning theories. These are ideas that resonate for collecting institutions with both focus on knowledge and learning. Bucio (2009) compared the concepts of knowledge economy and knowledge

ecology, arguing that the latter is a far more useful definition in understanding both the differences between public and private knowledge and also as the means of developing useful tools for assessing the value of knowledge to the user. In this latter study the topics of open access and collective policy are considered, both of which support the ecology model as a concept relevant to the future of collecting institutions.

Section 15.3 identified critical challenges to be faced, after which the next step is to find a practical approach to *aufheben* – what to preserve, what to change, focusing on radically new ways of delivery, while retaining the essential elements of the existing paradigm through compelling metaphors and models.

Chapter Six included an Organisational Ecosystem schematic (Table 6.7) based around the features of the Institutional Paradigm. In Chapter Thirteen the schematic was modified to reflect the ways in which the Institutional Paradigm had *assimilated* the Internet. This Organisational Ecosystem schematic 2.0 (Table 13.14) acknowledged the use of the Internet in the delivery of services, but the fragmentation across the range of collecting institutions exposed in Part Two means that for the harvester of knowledge there are significant barriers to collective discovery and fulfilment, for the following reasons:

- There are over 2,000 websites for collecting institutions in the UK of mixed quality and content (Copeland, 2014).
- Where national service offerings are provided, for example in academic and public libraries, they are embedded within local websites, many of which limit access to defined user groups.
- There is inconsistency in the disclosure of digital assets and in the investment made in the digitisation of collections.
- There is little evidence of collective focus on understanding the needs and behaviours of users, especially the expectation that all material, across a range of institutions, is easily discoverable.
- The scope and number of aggregation services means that where collections have been drawn together, they may be patchy in content and generally disconnected from each other.

15.4.1 **DO IT ONCE, DO IT RIGHT**

These points underline the need to move from weak or non-existent horizontal links *between* collecting institutions to a single co-ordinated framework for digital development and delivery; a framework rooted in both policy mandate and practitioner buy-in. This requires an ecological model very different from the Organisational Ecosystem depicted in Tables 6.5 and 13.14. This new model should prioritise the opportunities of the Generic Drivers of Change described in Chapter 14.3, offering the potential to resolve the three Strategic Challenges described in section 15.3. Table 13.14 is repeated below, with the addition of grey shading to highlight the most significant elements relevant to the new model:

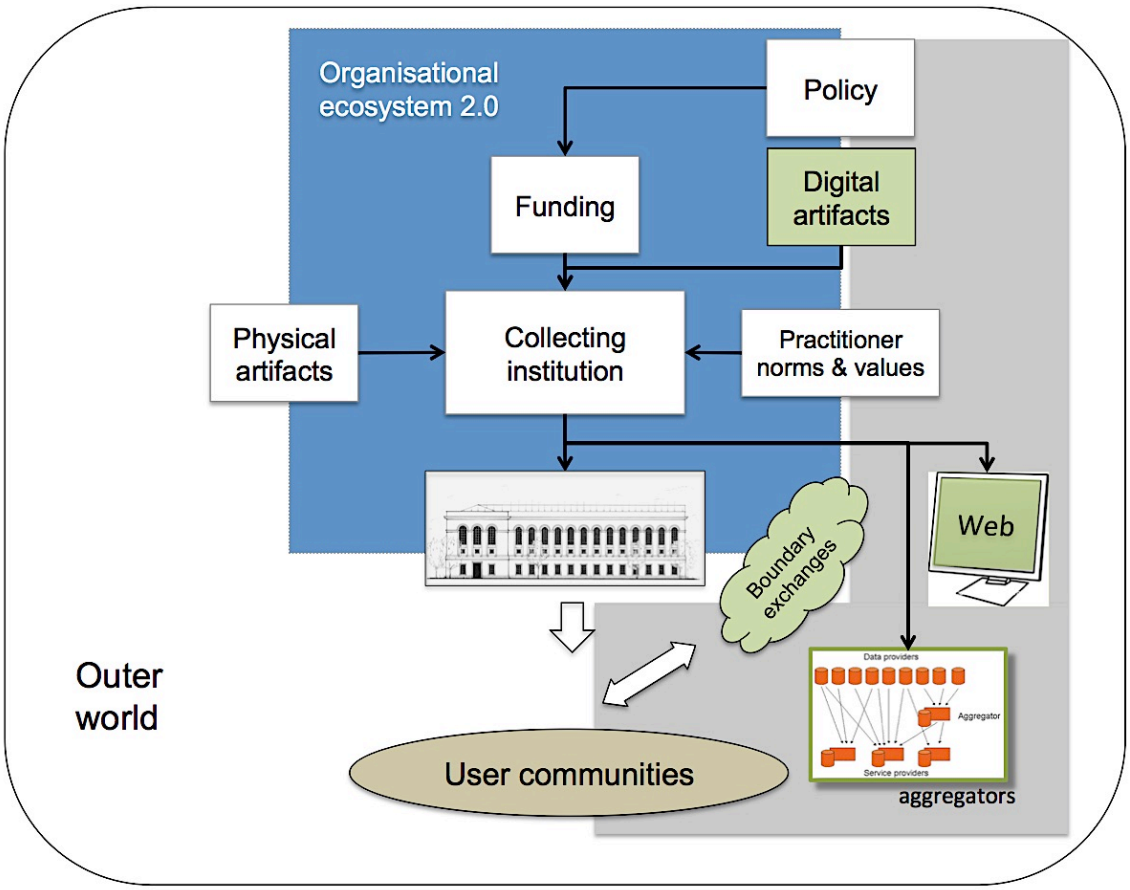

Table 15.3 *Priority constituents for a new digital ecology*

In the Organisational Ecosystem 2.0 model, all those elements - policy, digital artifacts, practitioner norms and value, the web, aggregators and boundary exchanges – although not under the sole control of the local organisation, lack any consistent policy setting and priorities horizontally across the extensive range of collecting institutions. Some collecting institutions have formal or informal links with external aggregators, many others do not. Re-creating this current fragmented arrangement to take maximum advantage of the Generic Drivers necessitates a different approach. The comparative analysis of Chapter Fourteen demonstrated that to resolve the differences highlighted in Table 15.1 will require radical change. Full exploitation of the single channel, two-way interactive nature of the Internet and the effects of Internet Gravity demand collective presentation of content and services. Without both tactical and strategic change it is highly unlikely that collecting institutions will maximise either digital demand or value in the medium to long term. Table 15.4 below offers a schematic representation of the principles of a new organisational approach:

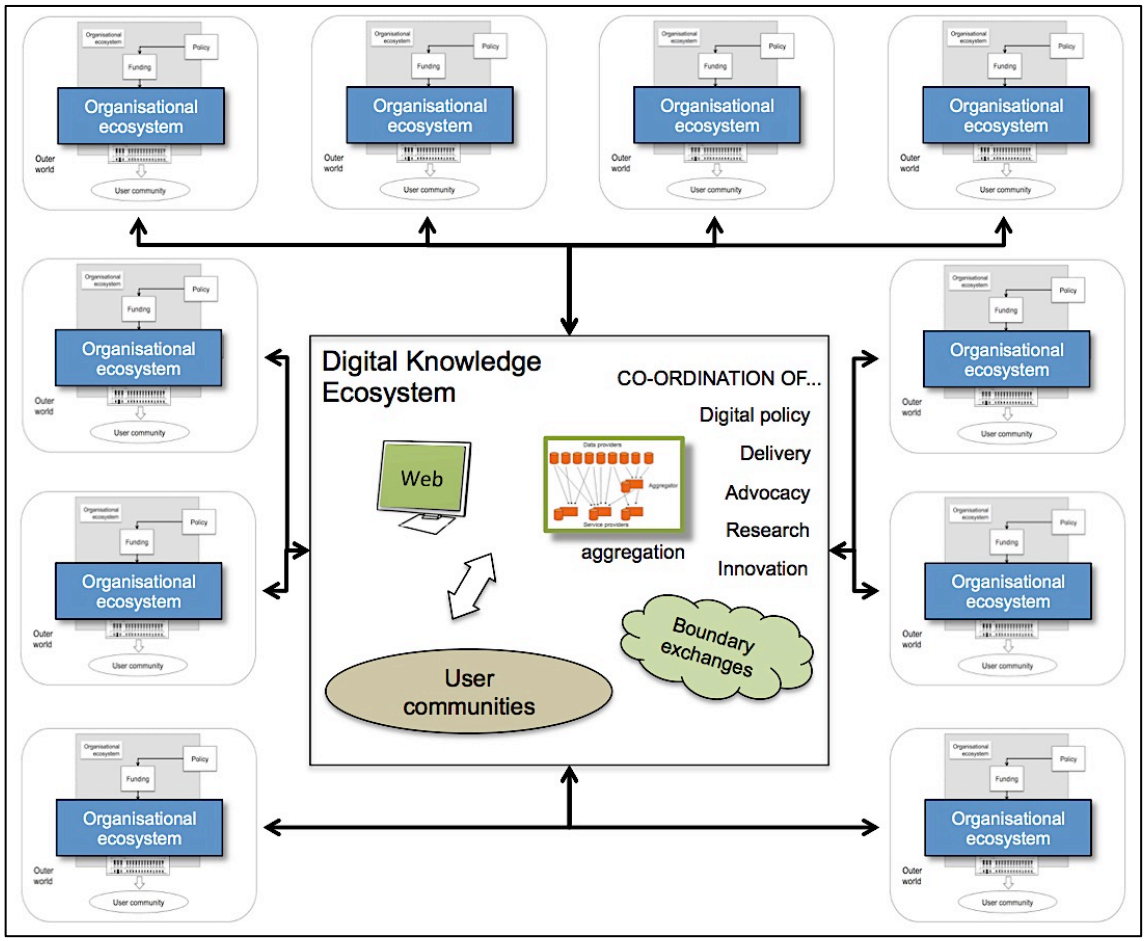

Table 15.4 *Digital Knowledge Ecology schematic*

This is a radically different model to the Organisational Ecosystem 2.0 and therefore needs elaboration. It defines a Digital Knowledge Ecology that contains within it the more than 2000 existing Organisational Ecosystems, as partners that interact with the single Digital Knowledge Ecosystem, acting as the central body to lead, manage and co-ordinate collective digital innovation and delivery. Within the Digital Knowledge Ecology, the Digital Knowledge Ecosystem would be responsible for a strategic digital portfolio including management of innovation and routes to market, directed by national approaches to the study of and interaction with audiences, individuals and communities of interest. The schematic representations of Tables 15.3 and 15.4 are the means of demonstrating as simply as possible the existing phenomena examined in Part Two and the kinds of reconfiguration implied by the evidence of Chapter Fourteen. The most fundamental difference about the Digital Knowledge Ecology is that it demands a new worldview across all collecting institutions, alongside changes in the way that organisations interact horizontally. It invites practitioners and policymakers to consider a digital future based on the Generic Drivers of Change rather than on the Institutional Paradigm of the past.

There are those who may suggest that a Digital Knowledge Ecology for the public sector should extend to embrace all public information and knowledge, and they may well be right.

There are those who argue for full local, regional or Home Nation sovereignty on digital matters, yet that threatens continued fragmentation for users whose behaviours may not involve any thought or knowledge about the many internal boundaries dividing the United Kingdom.

There will be those who point to existing aggregator services such as Europeana and the Digital Public Library of America and ask what is different about those and the Digital Knowledge Ecology, but at heart both of those services represent add-ons to the existing institutional frameworks and, as such, are a continuation of an industry-friendly innovation approach.

The Digital Knowledge Ecosystem model is an incentive for practitioners and policymakers to consider tough questions about future digital strategy, stimulating new ways of thinking about future strategies and possibilities. It is the identification of these matters that is the focus for Chapter Sixteen.

15.5 RESEARCH OUTCOMES AS TOOLS FOR CHANGE

Before moving to the final chapter it is important to articulate clearly the outcomes of the research and their importance in making choices about future collective strategy. These are set out in Tables 15.5-15.7 where the original research objectives are summarised together with the outcomes achieved:

PART 1. RESEARCH METHODOLOGY	
RESEARCH OBJECTIVE	OUTCOME
RO 1. Decide on the appropriate portfolio of methodological tools	Adoption of **hermeneutic phenomenology**, supported by systems modelling as the best-fit approach (Chapter Two)

Table 15.5 *Outcome of Research Objective One*

PART 2. IDENTIFICATION AND ANALYSIS OF CRITICAL FACTORS	
RESEARCH OBJECTIVE	OBJECTIVE
RO 2. Identify the key supply side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space **RO 3.** Identify the key demand side trends that are likely to impact on knowledge institutions' ability to provide effective services in the digital space	Broad analysis leading to the **creation of Generic Drivers of Change**, embracing socio-technical issues of innovation, technology and the impact on supply and demand sides (Chapter Four)
RO 4. Identify the form, components and priorities across knowledge institutions that define and direct existing service propositions	**Institutional paradigm defined** within the context of wider public policy frameworks (Chapters Six, Seven, Eight, Nine, Ten, Eleven, Thirteen)
RO 5. Review examples of the development of digitally-based knowledge collection services and examples of wider public sector innovation. More broadly consider institutions' commitment and ability to change	Literature review of material relevant to the research themes and of innovation in collecting institutions to identify of **a range of exemplars both in the 'inner world' of collecting institutions and the 'outer world'**. Plus assessment of practitioner approaches to innovation **demonstrating that the dominant form is aimed at sustaining the status quo.** (Chapters Eleven, Thirteen)

Table 15.6 *Outcomes of Research Objectives Two to Five*

Part 3. SYNTHESIS OF CRITICAL FACTORS	
RO 6. Develop a limited number of major factors influencing the current behaviours, opportunities and challenges for collecting institutions	**Opportunities and challenges identified** by comparing the key features of the institutional paradigm and the four Generic Drivers of Internet Change to create **Three Strategic Challenges** (Chapters Fourteen, Fifteen)
RO 7. Create a mission statement relevant to all collecting institutions to influence collectively government policy	**Shared Mission Statement defined** by synthesising the datasets from textual analysis (Chapter Thirteen)
RO 8. Establish the readiness potential of collecting institutions and practitioners for dealing with the speed and diffusion of socio-technical change	Synthesis of evidence from Chapter Six and Eleven to locate collecting institution innovation within the criteria of the Three Horizons Model (Table 7.3). The outcome was that collecting institutions, like the majority of the public sector **reflect H1 status quo, sustaining innovation, without evidence of preparedness for possible radical change in the future** (Chapter Thirteen)
RO 9. Create a conceptual model of a service paradigm for collecting institutions to deliver maximum value using the Internet	Analysis of Part Three evidence to create conceptual models of the boundary exchange process and a possible mechanism of an organisational approach to manage the future strategic development of digital innovation – **Three Strategic Challenges; Digital Knowledge Ecology.** (Chapter Fifteen)
RO10. Prepare a Dissemination Plan and recommendations for future actions and benefits from the user of the conceptual model	**Publication plan for short term research dissemination.** **Immediate actions** for the engagement of practitioners Possible further steps towards a **Blueprint for Change.** Potential **long-term benefits of the implementation** of the Blueprint (Chapter Sixteen)

Table 15.7 *Outcomes of Research Objectives Six to Ten*

While all of these outcomes influence how the future may be considered, it is appropriate, in support of the proposals made in Chapter Sixteen, to highlight specifically the tangible outcomes synthesised from the evidence of Part Two indicating their location within this thesis:

- Four Generic Drivers of Internet Change (Chapter 4.5).
- Definition of the Institutional Paradigm (Chapter 13.5.2).
- Understanding practitioners' degree of readiness for disruptive and transformational change (Chapter 13.5.3).
- Shared Mission Statement for collective action and advocacy (Chapter 13.2).
- Digital Knowledge Ecology concept (Chapter 15.4).
- Key themes and challenges for practical discussion and action - boundary exchange, learning, design, innovation, common purpose (Chapters 14 and 15.2).

15.6 CHAPTER SUMMARY

Chapter Fifteen synthesised the key challenges to be faced by collecting institutions if they wish to take full advantage of the potential value of the Internet, building on the comparative analysis of the Institutional Paradigm and the Generic Drivers of Change. It then presented a conceptual model – the Digital Knowledge Ecology – to form the basis for the development of actions towards shared strategic planning for the future. The Chapter concluded by summarising the general and specific outcomes of the research with their links to the Research Objectives. Chapter Sixteen completes the process of synthesis by exploring the priorities and strategies for radical change, enabling collecting institutions to develop successful digital services in the Network Society.

CHAPTER SIXTEEN
A Blueprint for Change

16.1 CHAPTER PURPOSE

> "In an unknown land a compass is more use than a map" (Leicester, Bloomer and Stewart, 2009, p8)

From the observed phenomena of the present in Part Two the research has justified the Three Strategic Challenges and proposed a new approach to the management and development of digital services based within a Digital Knowledge Ecology. The outcomes of the research do not provide a roadmap into the future. What they do offer is a compass bearing for the direction of debate and action, supported by a range of evidence derived from the observed phenomena.

Addressing Research Objective 10, Chapter Sixteen, the final chapter of this thesis, presents suggestions on how the Research Outcomes might be taken forward into a strategy and subsequent plan of action. Adoption of such a process would provide the means of validating the Research Outcomes. In the context of Ajjawi and Higgs' (2007) hermeneutic phenomenology model, described in Table 12.2, this addresses the sixth stage, *critique of findings*, and the subsequent *themes and stories*. Building on the Research Outcomes detailed in Chapter 15.4, the chapter outlines the stages and tasks necessary to create a shared journey into the future. It considers the reasons *why* collecting institutions should develop a Digital Knowledge Ecology - the Dissemination Plan; proposes *how* the initial steps and stages to its creation might proceed - the process map; and then draws together examples of *what* opportunities might be enabled in the medium to long-term (possible outcomes).

16.2 DIGITAL KNOWLEDGE ECOLOGY AS ARCHITECTURE

> "Whether it be the sweeping eagle in his flight, or the open apple-blossom, the toiling work-horse, the blithe swan, the branching oak, the winding stream at its base, the drifting clouds, over all the coursing sun, **form ever follows function**, and this is the law. Where function does not change, form does not change." (Sullivan, 1896, p408)

Louis Sullivan, whose architectural genius is still to be seen on the streets of Chicago to this day, expressed a fundamental principle of architectural practice taken up in the Modernist movements of architecture and design in the 20th century in the work of the Bauhaus (Forgács, 1995, p202) and Buckminster Fuller (Fuller, 1981, p51) for example. It is a principle equally relevant to an understanding of organisational architectures. Sullivan's pastoral imagery may seem out of context in this setting, yet the relationship between form and function has been a theme underpinning the whole of this research. Chapter 6.3.2 described the evolution of the Institutional Paradigm, embedded within wider organisational architecture; a form that fitted well with the functions of maintaining collections and making them available to users in fixed locations. As Chapters Thirteen and Fourteen showed, the nature of service management and

delivery in the digital space places a new set of requirements on the functions of collections management and delivery (characterised by the Four Generic Drivers of Change) that in turn redefine organisational form.

The Digital Knowledge Ecology model presented in Table 15.4 represents for collecting institutions a radical change, not of purpose, but a significant shift in the functions necessary to deliver sustained value using the Internet. Table 15.1 illuminated the dialectical differences between the Generic Drivers of Change and the Institutional Paradigm, highlighting why a new form of organisational architecture is essential. Yet the rate of change, both in regard to technical innovation and social behaviours and expectations, means that the slow evolution of institutional forms and functions observed in previous centuries is likely to increase the loss of strategic fit between those institutions and their audiences (Hodgson and Sharpe, 2008).

Accordingly, the compass bearing offered by the Research Outcomes points towards the need for change and the establishment of mechanisms for collective action. Here, the architectural analogy remains useful. The creation of the Digital Knowledge Ecosystem at the heart of the broader Digital Knowledge Ecology as an organisational construct must depend on a significant commitment to shared analysis and planning (and possibly piloting) to ensure that its structure can achieve the kinds of opportunities outlined in Chapter 14.3. It will also involve considerable effort of persuasion both within collecting institutions and wider public policy. Therefore, before any construction work takes place, careful planning will be necessary, and prior to that a mechanism to lead the planning will be required. These must be issues 'owned' by practitioners, and subsequently in this chapter the intention is to provide some of the landmarks and triangulation that will be necessary; to outline the first steps on the journey to the creation of a shared digital future – a Blueprint for Change.

In Table 7.1 the Three Horizons Model demonstrated the three horizons of innovation – sustaining, disruptive and transformative. As the research's outcomes show, the Institutional Paradigm reflects an approach to innovation that is designed to sustain rather than disrupt or transform. It is undoubtedly the case that to secure a valued future in the digital space, collecting institutions will have to deal with both disruption and transformation, beating a pathway from the Organisational Ecosystem to the wider embrace of the Digital Knowledge Ecology. In the next two sections, considering issues to do with process (the *how*) and possible long-term transformations that could be achieved (the *what*) specific examples of benefits will be described, but the primary action must be commitment to transformational change. This priority resonates with the recommendations of the Australian CSIRO report previously described in Chapter Fifteen:

> "The GLAM (galleries, libraries, archives and museums) sector faces enormous challenges in the next decade arising from the massive pace of change in its operating environment; challenges it can only face effectively by collaborating across the sector, beyond organisational and disciplinary boundaries…The growing expectation from the public for easy and seamless access to Australia's distributed national collection, the pressures of the operating environment and similarities in the digital practice of GLAM

> organizations make cross-sector collaboration more obviously crucial for innovation, resource and knowledge sharing." (Mansfield, 2014, p6)

16.3 LAYING THE FOUNDATIONS

> "The best way to predict the future is to invent it"[158]

The outcomes of the research point towards the need for positive collective action focused in a Blueprint for Change. The key proposal is that the future development and delivery of digital services should take place within the control of some collaborative framework (the Digital Knowledge Ecology), with some central agency (the Digital Knowledge Ecosystem) enabling a shared mission of collecting institutions. This section addresses the issues of *how* processes of awareness raising and of building consensus might be managed, what 'hooks' already exist, and what might be some of the priority actions that would need to be tackled: the *themes and stories* acting as the basis for consensus building. Medium and longer-term benefits are articulated in section 16.4. The most fundamental challenge facing collecting institutions in their engagement with the Internet is recognition that the current *sustaining* approach will increasingly place at risk the impact that they are able to achieve in the digital space; a loss of strategic fit. While a range of risks have been articulated in previous chapters, there is a difference between the detail of the phenomena described in those chapters and the communication of clear, concise messages in a form that may be understood by a broad spectrum of practitioners.

16.3.1 **DISSEMINATION PLAN FOR THE RESEARCH**

The purpose of this thesis has been to use a consistent methodological approach to gather phenomenological evidence to prove or disprove the Research Hypothesis. It is a document of discovery rather than action. The Digital Knowledge Ecology of Chapter Fifteen is intended as a conceptual model demonstrating the extent of change that collecting institutions must consider to gain full advantage of the Generic Drivers of Change. The model is not a solution, but a point of departure guiding direction for the future. Therefore to raise awareness of the research there is the need to communicate the ideas and possibilities in forms that will reach a wider audience. Neither the thesis nor the subsequent monograph in discussion with the series editor of an academic publisher would be the appropriate medium. Table 16.1 outlines a Dissemination Plan:

[158] Alan Kay, "The origin of the quote came from an early meeting in 1971 of PARC, Palo Alto research Center, folks and the Xerox planners. In a fit of passion I uttered the quote!" Available at: http://www.smalltalk.org/alankay.html [accessed 24th September 2014]

BRIEFING DOCUMENT FOR SECTOR LEADER MEETINGS	ARTICLES FOR PUBLICATION IN PROFESSIONAL JOURNALS
PURPOSE	
The briefing document would serve as an introduction to meetings with a small number of sector leaders (see below for further details on the purpose of the meetings). It will also be circulated on the researcher's blog and to his global network of contacts.	1. Short article for publication in CILIP Update, Museums Journal and ARC Magazine 2. Academic study for publication in New Library World, Museums Practice and Journal of the Archives and Records Association
CONTENT	
Both documents would address similar issues, but to different degrees and pitched towards the respective audiences: • The original research hypothesis and purpose • The scope of the evidence and key findings (both the inner world of collecting institutions and the outer world in which they operate) • The process of synthesis to produce the Institutional Paradigm, the Shared Mission Statement, the Four Generic Drivers, the Three Strategic Challenges and the Digital Knowledge Ecology. • The constraints of the Institutional Paradigm to be overcome: o Lack of consistent national policy frameworks prioritising and funding aggregated services across all collecting institutions. o Fragmentation and the siloed nature of collecting institutions restrict the opportunity for horizontal collaboration in digital innovation. o Innovation generally localised and directed at sustaining the existing service paradigm. • The recommended steps for planning a collective digital strategy for the future. • The potential social benefits of developing transformational service innovation online and the collective case to influence future national policy and to demonstrate the unique value of collecting institutions online.	

Table 16.1 *Summary of documents for Dissemination Plan*

At this stage, Table 16.1 is intended only as an outline of the priorities for dissemination. The proposed meetings with sector leaders would be informal to gain their general support for the further actions proposed below. Four agencies are currently identified for briefing meetings: the three lead professional bodies for practitioners – the Archives and Records Association of UK and Ireland, the Chartered Institute for Library and Information Professionals and the Museums Association, plus the Jisc. The three professional bodies are key agents for practitioner support. Involvement of the Jisc at this preliminary stage is important due to their long-time involvement with digital research and innovation (Chapter 11.6.2).

There is a spectrum of possible outcomes from this process of dissemination, from little or no enthusiasm from either the consultations or wider publication at one extreme to support from the professional agencies to assist with the implementation of a process of further planning. While raising the awareness of practitioners will have longer-term value, the key success factor must be support from those professional agencies and the Jisc to plan further actions. A possible contingency action should there be little active support might be to approach the Director of the Government Digital Service to explore how the Digital Knowledge Ecosystem/Ecology might be

linked to gov.uk. The preferred strategy would be to make that approach once the agencies had become engaged, to make a joint approach as part of subsequent actions. If necessary earlier contact might help other parties to become more interested in a strategic digital future. Appendix 5.1 provides an initial list of organisations that might be involved. Of course, prior to the dissemination exercise, it is hard to plan in detail for either outcomes or contingency actions. The key step will be to initiate the process of dissemination as soon as possible after the completion of research and thesis approval.

16.3.2 ACTION TO BUILD A SHARED DIGITAL FUTURE

Chapter Fifteen described Three Strategic Challenges to be tackled if a shared digital future is to be delivered:

- The quest for common purpose.
- The boundary exchange: from hunter/gatherer to harvester.
- The speed of innovation and change.

Based on the evidence in this thesis it is hard to see how collecting institutions might maximise the social value of their digital services without addressing three challenges that sit at the heart of the Internet's socio-technical determinism. Yet proposing a prescriptive agenda for action at this stage is inappropriate, since priority setting must be owned from the outset by those directly involved – the practitioners.

In considering *how* initial steps might be taken some generic comments can be made about principles essential to collective definition and conduct of actions. In Chapter 11.7, summarising the evidence from the literature review, the point was made that more than 75% of the material focused on "tangible problems within existing service frameworks", suggesting that the effects of the Institutional Paradigm on research and innovation was to focus most attention on solving short to medium-term *practical* problems. Schön (1991, p40) describes such an approach to problem solving as "technical rationality" pointing out that such behaviours mean that "…we ignore problem setting, the process by which we define the decision to be made, the ends to be achieved, the means by which may be chosen." The concept of "problem setting" he describes as *reflective thinking*. Schön's words neatly define the process that must be embedded in work to build the shared digital future.

The shift to reflective thinking can be illustrated by a simple example. The Digital Knowledge Ecology (Table 15.4) offers a *metaphor* for a paradigm shift in the organisation and delivery of digital services. The metaphor highlights a wide range of questions both of policy and of practice. Questions might include:

- How to begin and how to make practical progress?
- What are the practical steps to achieve a new architecture?
- Can the long-term value be articulated and justified?
- What should be the relationship of the Digital Knowledge Ecology to the wider knowledge economy agenda?
- What might it all cost?

- What would be the practical implications for institutions of many different shapes and sizes?

Each of these, and possibly many more, would need to be answered in deciding future strategy. However, in strategic terms they cannot be answered until the context of process and ends to be achieved are agreed. Overall mission and evaluation of strategic fit are thus far more significant in the first instance than finding answers to technical questions. Consequently, while recognising that practical action is essential, action should be rooted in a modus operandi that fosters agreement on what is to be achieved; what is the overall purpose. Table 15.1 compared the differences between the Generic Drivers of Change and the Institutional Paradigm using the dialectic concept of thesis and antithesis. Within that perspective success comes not from negotiated compromise, but from "problem setting" and "reflective thinking" to *lift up* (aufheben); a process of resolution through dialogue to agree what should be preserved and what present limitations should be set aside. Joint agreement on the long-term mission for a digital strategy must come first. In the simple clarity of Sullivan's words, "…form ever follows function".

16.3.3 **IN THE FOOTSTEPS OF OTHERS**

In addition to the long-term value that might be achieved through reflective thinking and collective strategy, shorter-term demonstrable benefits may also accrue. There is an argument to be made that developing new, collective approaches to service innovation exploiting the Internet, increasing access to knowledge and focused strongly on individual and community learning, would be a powerful message to government. It would show fragmented sectors coming together with a single mission and a single voice, planning a long-term future with services that could, in time, be far more cost effective in relation to value and reach than the existing status quo. Increasing access to digital services and learning opportunities are both high-profile, national policy agendas with which to engage. Part Two has shown examples of national campaigns, research and development and national funding and support programmes that provide some foundation for discussion and planning:

Sector Campaigns (Chapter 6.3.1)
• Museums Association Museums Change Lives programme • CILIP's Libraries Change Lives Awards • Archives and Records Association/The National Archives Explore Your Archive Campaign
Research and Development
• Calimera project outcomes (Chapter 11.5) • Digicult final report (Chapter 11.5) • CyMAL strategic plans for museums and libraries (Chapters 8.8 and 9.6) • Scotland national strategy for museums (Chapter 9.9) • Archives Task Force recommendation on the creation of an Archives Gateway (Chapter 10.2)
National Programmes
• People's Network project (Chapter 11.3) • MLA Archives Development programme (Chapter 10.2) • Renaissance in the Regions development programme (Chapter 9.2) • Strategic co-ordination role of The National Archives (Chapter 10.5)

Table 16.2 *Examples of sector related strategy, research and development*

Furthermore, despite tensions between national and local governments and the dominance of the Institutional Paradigm across the public sector, Chapter 6.2.2 reported a number of successful pan-organisational initiatives beyond collecting institutions, both of planning and of delivery. These ranged from task forces, special interest groups, national advocacy and policy documents to the highly-successful Government Digital Service.

There is, thus, evidence of collective action within each of the three institutional sectors and elsewhere in the public sector to encourage collecting institutions to point to the value in exploring radically new, shared approaches in the digital space; evidence to show the value of a Blueprint for Change.

Section 16.3 has examined a range of issues associated with actions that might arise from a successful dissemination process and a critical mass in support of the Digital Knowledge Ecology. It has highlighted both strategies and priorities for development alongside the content of the Dissemination Plan. Quite how any subsequent actions evolve towards a Blueprint will remain uncertain until reactions to dissemination have been assessed. However, the matters described in this section will all be important to creating support, dealing with the big challenges and implementation. The next section presents examples of the longer-term benefits that might be derived from a collective approach to digital services.

16.4 IMPACT OF A BLUEPRINT FOR CHANGE

> "The goal of futuring is not to predict the future but to make it better." (Cornish, 2004, xii)

Chapters One and Two made clear that the purpose of the research was to use observed evidence of the present, from both the inner world of collecting institutions and the outer world in which they operate, to gain insight into the challenges and opportunities they must confront from the increasing centrality to everyday life of the Internet. Additionally, the research aimed to use the evidence of *differences* to suggest ways in which the institutions might revise service paradigms to maximise their value in the digital space. While examples of disruptive innovation have been provided (Chapter 11.6) the research has deliberately avoided drawing detailed conclusions about future solutions since, as will be obvious from the present chapter, such tasks sit in the first instance with those directly involved with collecting institutions. The Digital Knowledge Ecology offers a means to articulate the organisational transformation that will be required, but the strategic and operational solutions necessary to a Blueprint must be resolved by collective debate and action. As made clear in the previous section, such solutions must achieve in the digital space, what the traditional Institutional Paradigm achieved for so long when service was rooted in physical collections in fixed locations: accessibility, reliability, trust and high value, supporting learning of all types for individuals and communities.

Nevertheless, having made the point that strategic solutions should arise from a process of collective development, some tangible examples of potential future benefits of a shared Blueprint and the Digital Knowledge Ecology may make evident *why* radical change must be seriously considered. The research has articulated Three Strategic Challenges to be overcome. A balancing of those challenges against long-term benefits could be of value both in the dissemination of the Research Outcomes and in subsequent planning and action. Some examples are provided below.

16.4.1 **POLICY**

Chapter Six drew attention to the limited influence collecting institutions are able to bring to national policy agendas. The main factors for this were the absence of co-ordination within and across institutional forms and the various central government departments responsible for them across the four Home Nations. Collective action to develop and promote the Blueprint would provide a range of new opportunities to influence policy locally and nationally:

- **Clarity of purpose**: a Shared Mission Statement would enable the three sectors to speak with one voice promoting common cause.
- **Bottom-up engagement**: a collective strategy for digital developments would provide an opportunity for wide engagement of practitioners, communities and other interested parties to contribute to the future, a single shared way of exploiting collections to maximum advantage, rooted in local need.
- **Power and influence**: The combination of the first two points makes possible collective attention-grabbing national advocacy. Shared purpose and a strategy that

demonstrates the national value, grounded locally, but linked to wider learning, digital inclusion and knowledge economy policies.

- **Economies of scale**: Alongside the increased user value created by the Digital Knowledge Ecology paradigm, greater co-ordination should also improve value for money and enable practical approaches to rationalisation both in terms of the avoidance of duplication and the reformulation of resources into virtual collections and themes.

16.4.2 THE USER AND THE BOUNDARY EXCHANGE

This section and the one that follows are predicated on there being some agency or co-ordination system managing the boundary exchange and embracing shared priorities of research and development – the Digital Knowledge Ecosystem in Table 15.4. An entity able to create deeper understanding of user behaviours and needs and the means of meeting them. The evidence of Chapter Four underlined the primacy of the user in the design of online services and the fundamental role of the exchange that takes place across the supply/demand boundary; reflected in the fourth Generic Driver of Change.

To understand and design user-friendly delivery systems demands far greater understanding of user behaviours and expectations, combined with clear understanding of how to support a range of learning needs. If digital artifacts are the supply side value creators, then learning (formal and informal) is both the process and the outcome of action by the individual to exploit those artifacts, rooted in the individual's need. Such understanding within a collective delivery framework will provide powerful evidence of the social value of collecting institutions, increasing their impact both in policy and in use while, at the same time, being better able to make explicit their unique identity (as leaders in the processes of learning for life) within an increasingly competitive online environment.

16.4.3 INNOVATION AND SUSTAINABILITY

> "The report confirms that there is an appetite for the sector to innovate and create a new generation of experiences that take advantage of some of the Internet's unique characteristics, however challenging that may be, given the current round of cost cutting." (MTM London, 2010, p44)

It seems unlikely that the speed and impact of socio-technical change will lessen in the foreseeable future and consequently collecting institutions will find the outer world landscape continues to evolve, challenging both sustainability and strategic fit:

- **Maintaining strategic fit:** Chapter 15.3.1 identified the risks that organisations begin to fail when purpose and form are not congruent with environmental changes. The rate of socio-technical change of digital technologies suggests that collecting institutions must constantly review and reflect on the relationship between supply and demand. In Chapter 6.2.2 Bauman (2007) highlighted the constant reformation of social forms in contemporary society. Schön (1973) argued that to deal with dynamic change, institutions must become "learning systems" capable of bringing about their own

continuous transformation. With the current fragmentation of digital developments across collecting institutions this would be impossible. The convergence implicit in the Digital Knowledge Ecology concept, with co-ordinated research and innovation and analysis of future users' needs, offers the best chance to maintain strategic fit in the digital space.

- **Innovation**: For organisations in the private sector, innovation is about gaining advantage in a competitive market. For collecting institutions innovation must be the means of providing maximum value for individuals and communities, with the ability to compete *collectively* to ensure that in the digital space their collections and services are valued and distinct from those in the outer world. Innovation from this perspective demands a single entity, enabling and nurturing good ideas by demonstrating utility, to ensure that they are adopted as widely as possible – do it once, do it right. A redefined process and relationship architecture would not only improve socio-technological outcomes *per se*, but provide a shared, richer understanding of the exchange processes as the means of deciding *how* to use the technology and the collections to greatest advantage.
- **Practitioner skills and education**: Traditionally, the education of workers in museums, libraries and archives has operated along separate tracks. There were and remain underlying principles of purpose and practice that are more similar than different, as explained in Chapter Six, but the different demands of physical media placed limits on the common strands of the educational process. One of the key messages to emerge from Part Two was the fact that, once in digital form, all objects and documents can be mixed and mashed using tools and techniques that generally are interchangeable and that many of the skills associated with the technical operation of those tools and techniques have not been part of the traditional professional education system. If there is a single interface to access all digital assets, clearly there will be less need for direct management of the interface in local organisations, but at the same time new skills will be required in collecting institutions, creating the opportunity to redefine skills and professional education. The recent **Remix Report: Culture, Technology, Entrepreneurship** (Culture Label, 2014) considers the evolving role of the *cultural entrepreneur* as an agent for integrating across different organisational boundaries and working collaboratively to create better and more accessible online cultural services whether in the private or the public domains. Such a development offers the opportunity for the retooling of practitioners' education and skills to meld co-operation across a variety of institutions and sectors.
- **Redefining the collection for the 21st century:** Chapter Eleven highlighted both the value of aggregation services and the reality that there is a diversity of such services, some of which offer access to only a limited audience. The core intention of the Digital Knowledge Ecology is institutional commitment to making digital collections and services available through a ubiquitous channel so that everything may be found in one

place. This plays to the strength of Internet gravity creating an integrated body of digital assets so that the richness and diversity of collections becomes more accessible to all. Additionally, over time, the advances of the open access movement present the opportunity to extend the reach of collections into new platforms and audiences[159]. New educational programmes such as MOOCs (massive online open courses) and the schools' curriculum could take advantage of the ability to build packages from the resources. Factual broadcasting might benefit from linking programme topics to an online body of knowledge providing learning opportunities during and beyond the programme's broadcast, linking Digital Knowledge Ecology to the BBC to the Open University perhaps. Value derives then from the collective worth of all assets, rather than the value of individual museums, libraries or archives. The integration of the skills of design for learning, broadcast production values, reportage and 'crowd' techniques such as social search into the management and development of the Digital Knowledge Ecology would produce themes and learning journeys open to all. Such new configurations of resources and skills could be both a powerful boost to public usability and the status of collecting institutions within wider policy agendas.

Section 16.4 has considered a range of opportunities that could arise in the medium to long-term. They are simply examples of what might be better achieved within the new organisational architecture and each in its own way has importance to the future of collecting institutions in the Network Society. The examples will be important to provide a focus on long-term potential during the development of a Blueprint for Change.

16.5 CONCLUSIONS

> "The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew." (Lincoln, 1862)

This final chapter has laid out a series of possible next steps based on the outcomes of the thesis, as summarised in Chapter 15.5. It triangulates a series of possibilities for action drawn from those outcomes, proposing an approach to test both the outcomes and next steps in the wider community of interested parties. This testing, using the Dissemination Plan, represents the final stage of the hermeneutic phenomenology process of Table 12.2. Subsequent approaches to action and priorities will be in the hands of those directly involved in the management and development of collecting institutions. Section 16.4 provided examples of the kinds of benefits that might accrue to the institutions and their users should the Blueprint for Change emerge as the strategic driver for a digital future. These examples include increasing advocacy capabilities; redefining the skills sets needed for the future; developing a deeper

[159] Rijksmuseum website describing open access to all digital collections: Available at: http://pro.europeana.eu/pro-blog/-/blogs/how-the-rijksmuseum-opened-up-its-collection-a-case-study [accessed 30th October 2014]

understanding of the role of learning across the boundary exchange; a co-ordinated approach to innovation and its diffusion and the redefinition of the role and value of a digital collection in the Network Society. The examples of Chapter 16.4 provide aspirational opportunities for collecting institutions and could influence how physical collections are exploited alongside the building of the Digital Knowledge Ecology.

However, the possibilities described do something more important that must be the concluding message of this thesis. The voice of Abraham Lincoln, addressing the American Congress at the height of the Civil War, summarises elegantly the range of digital challenges and opportunities facing collecting institutions. The juxtaposition of “quiet past” with the “stormy present” encapsulates the choice between *status quo* and *transformative change* that has been portrayed in Part Three. The social effects of digital innovation cannot be ignored. While the public sector and the private sector are different, that difference risks becoming less clear in the digital space, where all are part of the same mass marketplace.

The concept of the Digital Knowledge Ecology described in Part Three is not simply the ultimate repository for everything - an aggregator of aggregators for example. In embracing strategic innovation, skills change and the reconfiguration of process and relationship architecture it presents a paradigm shift - a leap into the future - for all those working with collections. The thesis has identified reasons why the traditional *status quo* Institutional Paradigm might constrain the exploitation of services in the Network Society. Chapter Thirteen demonstrated the lack of practitioner readiness potential for disruptive and transformational change.

The outcomes of the thesis present the means to redefine not just how digital collections are managed, but the worldview of practitioners. The Four Generic Drivers provide the foundation on which to build effective and sustainable digital services placing the user at the heart of all activities. Rising to the challenges that the thesis has identified must empower practitioners and policymakers to reflect on the broader, long-term future of collecting institutions in the 21st century. To think anew and act anew.

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